WD Sentinel™ DX4200

Storage Server

Administrator and Maintenance Guide

WD® Service and Support

Should you encounter any problem, please give us an opportunity to address it before returning this product. Most technical support questions can be answered through our knowledge base or email support service at *http://support.wd.com*. If the answer is not available or if you prefer, please contact WD at the best telephone number shown below.

Your product includes 30 days of free telephone support during the 2-year standard limited warranty period. This 30-day period starts on the date of your first telephone contact with WD Technical Support. Email support is free for the entire warranty period and our extensive knowledge base is available 24/7. To help us keep you informed of new features and services, remember to register your product on the Registration page on the user interface or online at *http://register.wd.com*.

WD Guardian Services

When you need a little help from an expert, we'll take care of you! WD Guardian Services offers flexible, affordable and hassle-free technical support and extended warranty plans with a variety of benefits. Choose the plan that works best for your business. Visit *www.wdguardian.com* for details.

Accessing Online Support

Visit our product support website at *http://support.wd.com* and choose from these topics:

- **Downloads** - Download drivers, software, and updates for your WD Product.
- **WD Support Portal** - Register your WD products and get support information customized to your needs.
- **Warranty & RMA Services** - Get Warranty, Product Replacement (RMA), RMA Status, and Data Recovery Information.
- **Knowledge Base** - Enter keyword, phrase, answer ID, or PID.
- **Installation** - Get manuals, installation guides, and documentation for your WD product.
- **WD Community** - Share your thoughts and connect with other WD users.

Contacting WD Technical Support

When contacting WD for support, have your WD product serial number, system hardware, and system software versions available.

North America	
English / Spanish	855.556.5117
South America	
Chile	1230 020 5871
Colombia	009 800 83247788
Venezuela	0800 100 2855
Peru	0800 54003
Uruguay	000 413 598 3787
Argentina	0800 4440839
Brazil	0800 7704932 0021 800 83247788

Europe (toll free)*	00800 ASK4 WDEU (00800 27549338)
Europe	+31 880062100
Middle East	+31 880062100
Africa	+31 880062100
Russia	8 10 8002 335 5011
Asia Pacific	
Australia	1800 429 861 / 0011 800 2275 4932
China	800 820 6682 / 400 627 6682
Hong Kong	3057 9031
India	1800 200 5789 / 1800 419 5591
Indonesia	001 803 852 3993
Japan	0800 805 7293
Korea	02 2120 3415
Malaysia	1800 817 477
New Zealand	0508 555 639 / 00800 2275 4932
Philippines	1800 1855 0277
Singapore	1800 608 6008
Taiwan	0800 225 593
Thailand	00 1800 852 5913
Other countries	+86 21 2603 7560

** Toll free number available in the following countries: Austria, Belgium, Czech Republic, Denmark, France, Germany, Ireland, Italy, Netherlands, Norway, Poland, Slovakia, Spain, Sweden, Switzerland, United Kingdom.*

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1

Important User Information

Important Safety Instructions
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About This Guide

Important Safety Instructions

This device is designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated into this unit will protect you if you observe the following procedures for installation, use, and servicing.

- Follow all warnings and instructions marked on the product.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use this product near any liquids.
- Do not place this product on an unstable surface. The product may fall, causing serious damage to the product.
- Do not drop the product.
- Do not block the slots and openings on the back or bottom side of the chassis; to ensure proper ventilation and reliable operation of the product and to protect it from overheating, these openings must not be blocked or covered. Making sure the server is standing upright also helps prevent overheating.
- Operate this product only from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- Never push objects of any kind into this product through the chassis slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
- Ensure that you keep the door lock keys that come with your WD Sentinel device in a safe place.
- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled on the product.
  - If the product has been exposed to rain or water.
  - If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment may result in damage and require extensive work by a qualified technician to return the product to normal condition.
  - If the product has been dropped or the chassis has been damaged.
  - If the product exhibits a distinct change in performance, contact WD Customer Support at *http://support.wd.com*.

WARNING! **The WD Sentinel™ Server uses a lithium battery, type CR2032. There is danger of an explosion if the battery is incorrectly replaced. Replace only with the same or equivalent battery type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.**

Handling Precautions

WD products are precision instruments and must be handled with care during unpacking and installation. The WD Sentinel server may be damaged by rough handling, shock, or vibration. Be aware of the following precautions when unpacking and installing your external storage product:

- Do not drop or jolt the WD Sentinel server.
- Do not move the unit while it is powered on.
- Do not use this product as a portable drive.

Recording Your WD Product Information

Remember to write down the following WD product information, which is used for setup and technical support. Your WD product information is found on the label on the bottom of the device.

- Serial Number
- Model Number
- Purchase Date
- System and Software Notes

About This Guide

This Administrator and Maintenance Guide provides detailed instructions and information for WD-specific interface elements and functions. Unless otherwise noted, refer to *Microsoft® Online Help* for standard interface elements and functions. This guide uses the following conventions:

Convention	Used for...
Bold font	Names of items on a page such as menus, buttons, option names, fields, and tabs that the user must click or complete and keys the user must press.
Note:	Extra, but not vital, information
Important:	Essential Information to know or to prevent problems when using the WD Sentinel server
WARNING!	Vital information for operating the WD Sentinel server or to prevent damage to the server or your computer.

2

Product Overview

Getting to Know Your WD Sentinel DX4200 Server
Key Features
System Requirements and Compatibility Information
Technical Specifications
Product Views
Indicators
LEDs
Where to Find Help

Getting to Know Your WD Sentinel DX4200 Server

Congratulations on your purchase of the WD Sentinel DX4200 Windows Storage Server. Your WD Sentinel DX4200 device delivers a reliable, easy-to-deploy and manage storage server designed for small business or workgroup environments. The WD Sentinel DX4200 Storage Server provides secure centralized storage and seamlessly integrates within almost any existing infrastructure.

Your WD Sentinel DX4200 features an easy-to-use WD StorCentral Dashboard, hard drives optimized for reliability, quality, and performance, an Intel Atom dual-core processor, and Windows Storage Server 2012 R2 Workgroup.

Key Features

WD StorCentral Dashboard

The WD Sentinel DX4200's proprietary dashboard includes easy-to-use task wizards for initial set up and common management tasks like storage configuration. It also provides an at-a-glance summary of the system status, and manages networking, alerts, registration, software updates, performance, and health monitoring.

WD enterprise-class hard drives

Equipped with WD Se hard drives that feature high capacity storage, peak performance and 24/7 datacenter-caliber reliability.

Seamless Integration

The WD Sentinel DX4200 easily integrates into workgroups, Active Directory, and most other environments. Within the Active Directory environment, Microsoft's Server Manager offers a single view of all servers joined to the domain.

Security

WD Sentinel DX4200 has multiple layers of security. Beginning with physical security, the WD Sentinel DX4200 has a bezel lock to prevent hard drives from being removed from the system. It also includes a Kensington-style lock slot to secure the DX4200 to a desk. Upon power up, the BIOS creates a secure UEFI boot environment. This prevents unauthorized access to your company data by preventing booting from root kits. The Windows Storage Server 2012 R2 Workgroup also contains layers of security. The WD Sentinel DX4200 can manage users locally with multiple levels of access, and can be fully integrated into and existing Active Directory.

Windows Storage Spaces

With Windows Storage Spaces, you can create large storage spaces and add more drives to them when you run low on pool capacity. With the minimum of at least two WD-populated drives, you can have two or more drives in the storage pool (data parity) and create storage spaces that won't be affected in the event of a drive failure.

Pre-installed Boot Drive

WD Sentinel DX4200 comes with one 2.5 inch boot drive pre-installed with Windows Storage Server 2012 R2 Workgroup and specialized hardware services and drivers. The pre-installed boot drive provides the ability to keep the OS running from the boot drive while redeploying or changing applications and running folders on the large capacity data drives. This allows businesses to save deployment time, as there is no need to install from a DVD or search for any specialized drivers to install online. The WD Sentinel DX4200 comes with the option to add a second boot drive with RAID 1 data redundancy.

Redundant power capabilities

WD Sentinel DX4200 offers dual power supply ports, so in the event of a power surge or other failure damage to the power supply, the second power supply will take over, providing small businesses with the added peace of mind knowing that their server will remain operational.

Dual Gigabit Ethernet Ports

WD Sentinel DX4200 comes with two Ethernet ports that can be configured for fault tolerance, aggregated for high performance, or used for two separate LANs.

A Total Solution with Industry-Leading Technology Partners

The WD Sentinel DX4200 combines hardware and software from industry leaders to deliver a reliable, secure, and easy-to-manage storage server designed specifically for medium-sized businesses to small enterprise environments. WD Sentinel DX4200 features:

- **Unified Storage** - The WD Sentinel DX4200 delivers an ultra-compact and quiet unified storage solution with NAS functionality for file sharing and iSCSI SAN for block level storage for virtualized environments.
- **Intel® Atom® processor** – Built with an Atom dual core processor inside, with 4 GB ECC RAM expandable to 16 GB RAM, the WD Sentinel DX4200 can easily handle your business's computing and file storage demands.
- **Windows® Storage Server 2012 R2 Workgroup** – The dependable Microsoft Windows Storage Server 2012 R2 Workgroup operating system provides the cost effective, reliable, and easy-to deploy and manage storage solution your business needs to quickly and efficiently organize, protect, and share your critical business data using the familiar Windows user experience.

WD Guardian Services

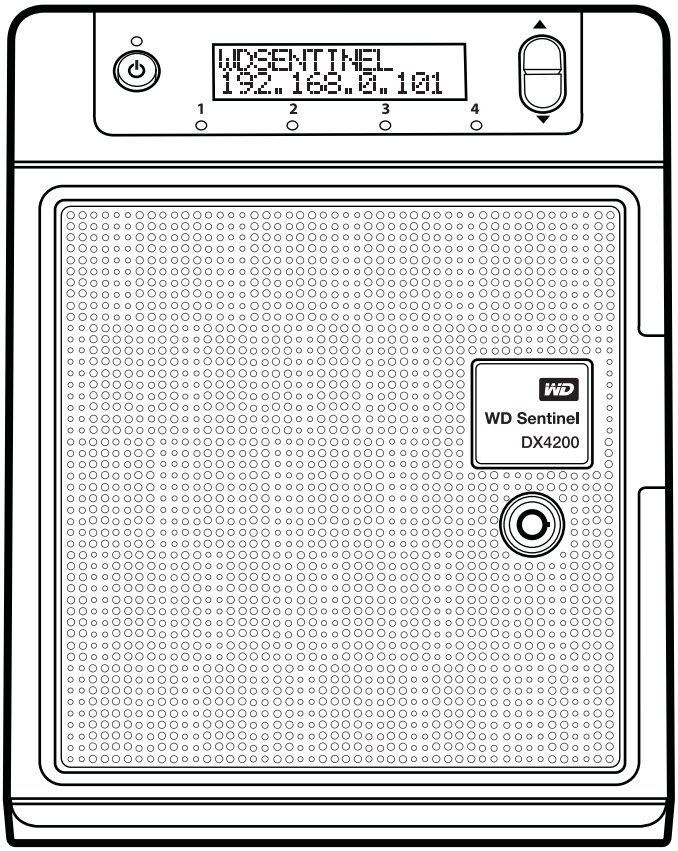
When you need a little help from an expert, we'll take care of you! WD Guardian™ Services offers flexible, affordable and hassle-free technical support and extended warranty plans with a variety of benefits. Choose the plan that works best for your business. With the purchase of the WD Sentinel DX4200, WD is offering one FREE year of WD Guardian Pro, which will be auto activated upon product registration. For details about WD Guardian Services, visit *www.wdguardian.com*.

Why WD

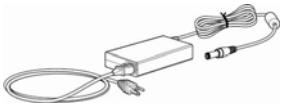
WD has been making hard drives for over 40 years. We know how to build drives to store and protect your data because we understand that your company's data is paramount to your business success.

Package Contents

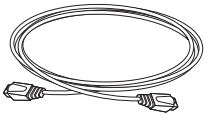
- WD Sentinel Storage Server
- 1 RJ-45 Ethernet cable
- 1 -1.8 meter power adaptors with cord
- 2 door lock keys
- Basic Installation Guide



WD Sentinel
DX4200



1.8 meter power cord and power adaptor



Ethernet cable

Basic Install Guide

For information on additional accessories, visit:

US	*www.shopwd.com* or *www.wdstore.com*
Europe	• Austria: *www.wdstore.de* • United Kingdom: *www.wdstore.eu* • France: *www.wdstore.fr* • Italy: *www.wdstore.it* • Germany: *www.wdstore.de* • Spain: *www.wdstore.es* • Netherlands: *www.wdstore.nl* • Rest of EU Countries: *www.shopwd.eu* or *www.wdstore.eu*
All others	Contact WD Technical Support in your region. For a list of Technical Support contacts, visit *http://support.wd.com* and see Knowledge Base Answer ID 1048.

System Requirements and Compatibility Information

Requirement	Description
File Sharing Support / Client Operating System	File sharing support for Linux, UNIX, and Windows operating systems.
Local Network	Router/switch (Gigabit Ethernet recommended to maximize performance)
Display and Peripherals	• Super VGA (800 x 600) or higher-resolution monitor • USB Keyboard • USB Mouse or compatible pointing device

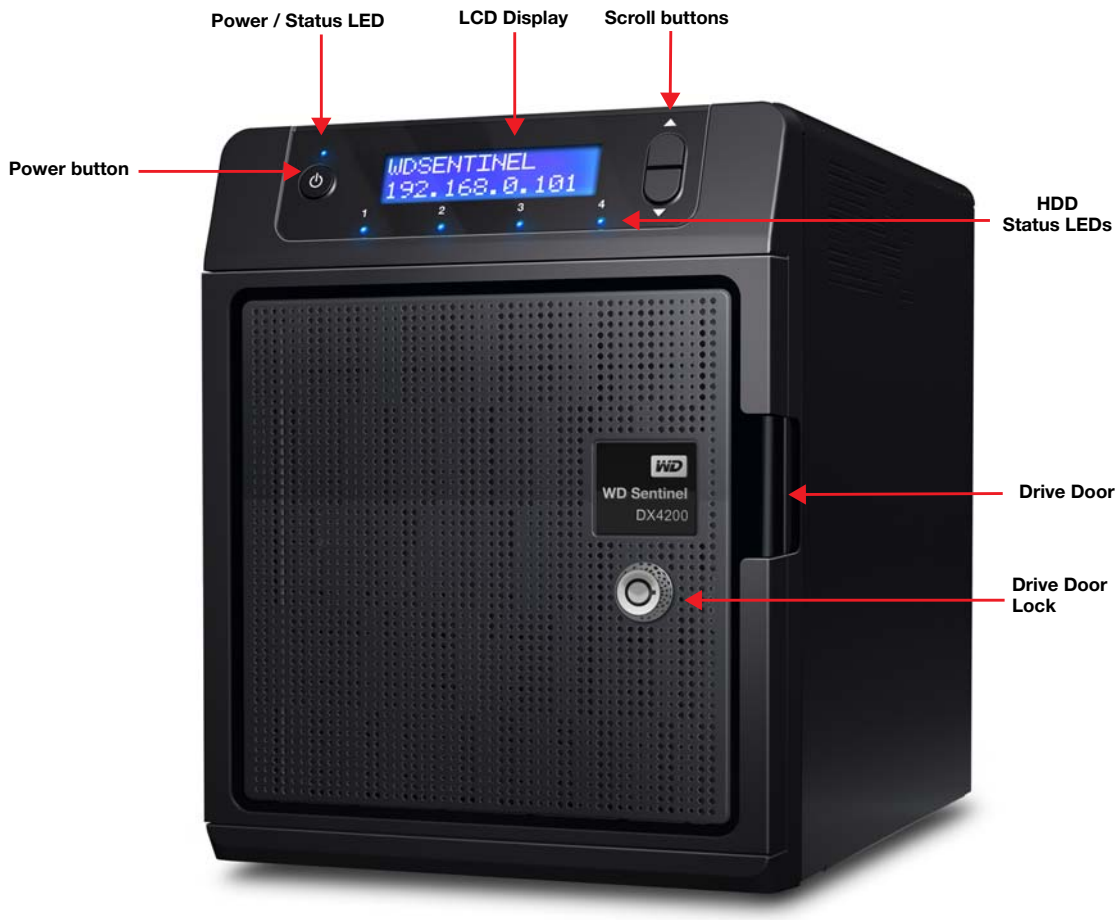
Technical Specifications

Specification	Description
Interfaces	• 2 High performance (10/100/1000) Gigabit Ethernet connections • 4 ports of powered USB 3.0 • 1 VGA Port • 2 Power Supplies (DC in)
Supported protocols	CIFS/SMB, NFS, HTTP, HTTPS, WebDAV
Internal hard drives	**4 WD 3.5-inch SATA Best in Class hard drives** Pioneered by WD, this feature prevents drive fallout caused by the extended hard drive error-recovery processes common to desktop drives. **Approved Drive Models** For a complete list of approved drive models, search for Answer ID 9443 in the WD Knowledge Base at *http://support.wd.com*.
Internal boot drive	**1 WD 2.5-inch SATA Best in Class hard drive with RAID-specific time-limited error recovery (TLER)** Pioneered by WD, this feature prevents drive fallout caused by the extended hard drive error-recovery processes common to desktop drives. **Approved Drive Models** For a complete list of approved drive models, search for Answer ID 9443 in the WD Knowledge Base at *http://support.wd.com*.
CPU	• Intel® Atom™ C2338 Dual Core
Memory	• 4 GBytes ECC (expandable to 16 GB)
Drive bays	• 4 3.5 inch hard drive bays • Hot swap capable • Trayless design
RAID level	• Redundant Storage supported • Windows Storage Spaces • RAID Level 1 for boot drive
Physical dimensions	• Length: 8.80 inches (223.5 mm) • Width: 6.69 inches (170.0 mm) • Height: 8.10 inches (205.7 mm)
Weight	• 8 TB: 11.33 lbs (5.14 kgs) • 16 TB: 14.64 lbs (6.64 kgs)
Capacities	• 8TB (2 x 4TB) • 16TB (4 x 4TB)
Power	• 2 DC power ports • 1 Power Supply included (optional second)
Power supply	• Input voltage: 100 to 240 V AC • Input frequency: 50 to 60 Hz • Output voltage: 19V DC, up to 7.9A
Temperature	• Operating temperature: 0 to 35 °C (32 to 95 °F) • Non-operating temperature: -40 to 70°C (-40 to 158 °F)
Switches	• Power • Recovery • LCM Scroll buttons

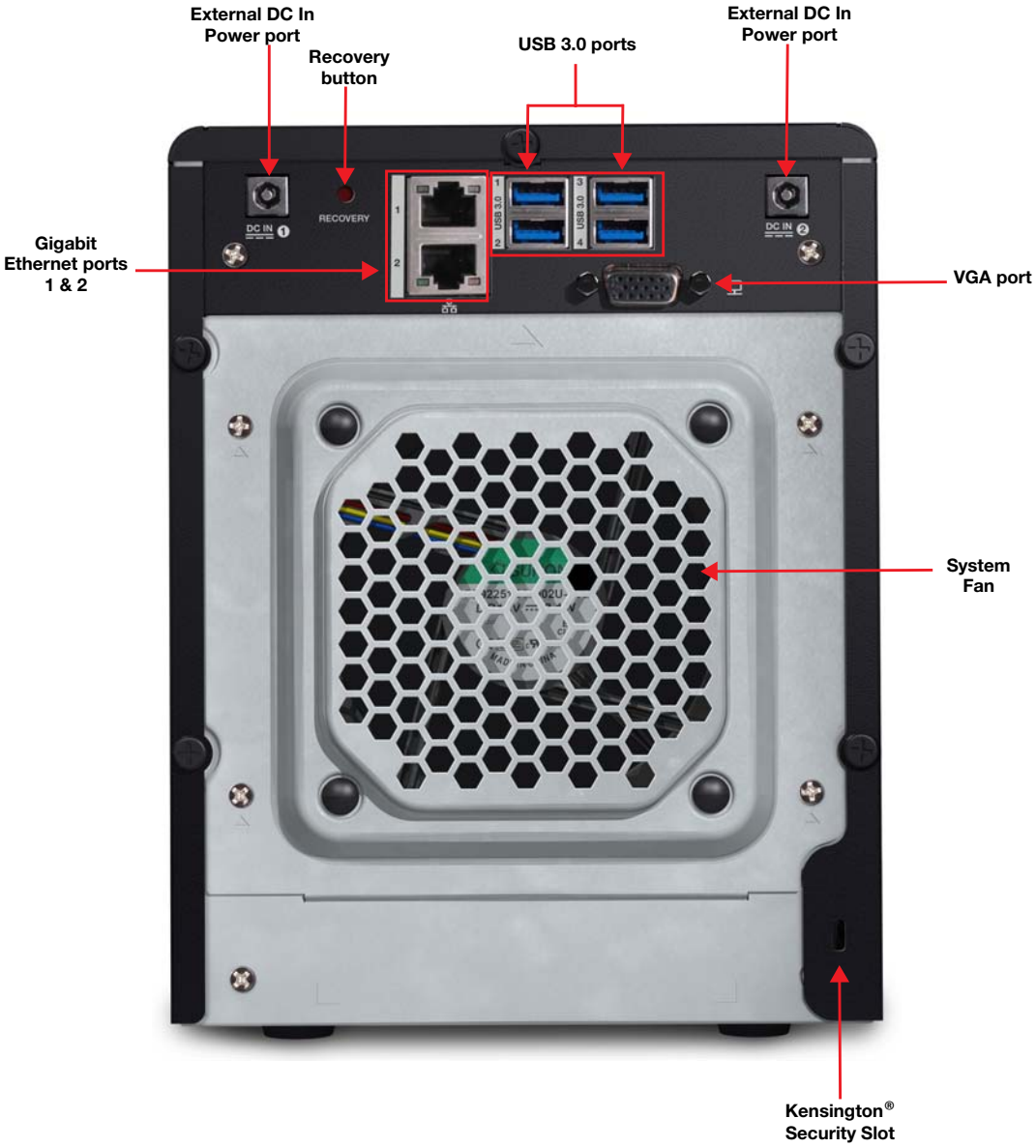
Specification	Description
LEDs	**1 Power LED** • Solid Blue indicates boot status • Solid blue once booted, with no pending fault conditions, indicates a good operational state • Flashings RED indicates a fault condition **2 Ethernet Port LEDs** • Flashing green indicates activity • Solid amber indicates that there is a link connection • Off indicates inactive state **4 Drive Tray LEDs** • Flashing blue indicates drive activity • Solid blue indicates drive is connected • Solid RED indicates drive fault (Drive must be replaced)
Operating System	Windows Storage Server 2012 R2 Workgroup

Product Views

Front View



Back View


External DC In Power port
Recovery button
USB 3.0 ports
External DC In Power port
Gigabit Ethernet ports 1 & 2
VGA port
System Fan
Kensington® Security Slot
DC IN 1
RECOVERY
USB 3.0
DC IN 2

Indicators

Component	Icon	Description
Ethernet ports		Connects the device to a local network.
DC In connector		Connects the device to a DC power cord and the power outlet.
Recovery button	RECOVERY	Button on the back of the server recovers the server (including the operating system) while using a USB drive in an event of an OS corruption.
USB ports		Connects with USB 3.0 devices such as a USB storage, USB mouse, USB keyboard, or a UPS.
VGA port		Connects to your VGA monitor
Kensington security slot		For drive security, the device is equipped with a security slot that supports a standard Kensington security cable. Visit *http://www.kensington.com/* for more information.

LEDs

The LEDs on the WD Sentinel device identify the status of the unit.

LED	Color	State	Description
Power LED	----	Off	WD Sentinel server is currently inactive.
	Blue	Solid	WD Sentinel server is booting or has successfully booted the software and is operational.
	Red	Flashing	Indicates that a serious fault has occurred and needs immediate attention.
Drive LEDs	----	Off	If the LED is off while other drive LEDs are on, no drive is installed in the bay.
	Blue	Solid	Drive is connected.
	Blue	Flashing	Drive is currently active.
	Red	Solid	Indicates drive failure. Replace this drive as soon as possible.
Ethernet Port	----	Off	Indicates an inactive state.
	Green	Flashing	Indicates link activity.
	Amber	Solid	Indicates that there is a link connection.

Where to Find Help

This manual provides step-by-step instructions and other important information regarding your WD product. It is meant for the person serving as the administrator of the WD Sentinel DX4200 device. You can download translated versions and updates to this manual from *http://products.wd.com/updates*. For more information and news about this product, visit our website at *http://www.wd.com/*.

Additional Reference	Description
Basic Installation Guide	Included in the product box or available at *http://products.wd.com/WDSentinel-DX4200*; helps you install the WD Sentinel device.
WD Online Help	Specific descriptions and instructions accessed on WD StorCentral.
Microsoft Online Help	• Access detailed explanations and instructions for Windows Storage Manager by clicking the **Help** button within the application. • Search for help on a specific topic or term by entering it in the Microsoft Online Help search field in the top right of any Windows Storage Manager page. • Access the entire Microsoft Online Help system by clicking *Microsoft Online Help*.

Important: Not all Microsoft Online Help is applicable to the WD Sentinel DX4200. The WD Online Help and this Administrator's Guide take precedence over the *Microsoft Online Help.*

3

Connecting the Server and Getting Started

Administrator Responsibilities
How the WD Sentinel Fits into Your Office
Connecting the WD Sentinel Server to Your Network
Setting up your WD Sentinel Server (one time only)

This chapter steps you though the process of connecting and setting up your WD Sentinel DX4200 server.

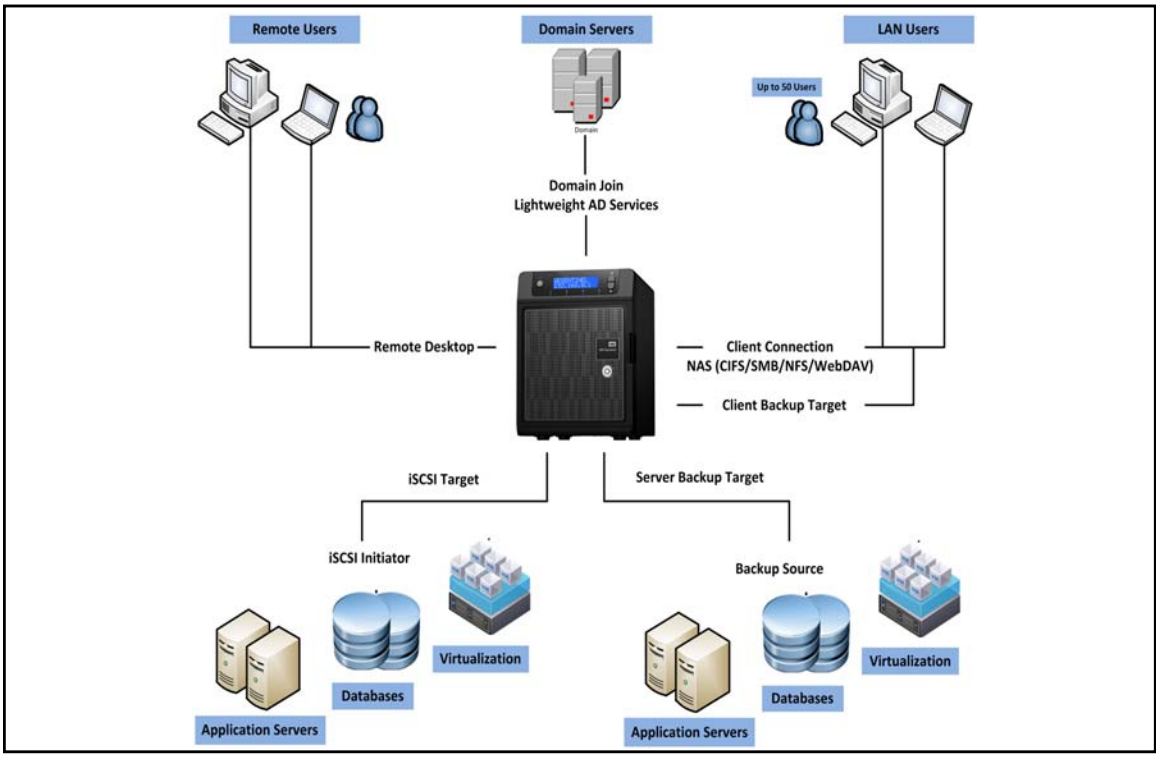
Administrator Responsibilities

At a high level, the Administrator performs the setup and routine management tasks on the WD Sentinel server. This person also holds the Administrator password for your WD Sentinel server.

The table below provides a view into some of the Administrator's tasks:

	Tasks
Primary Setup	• Physically connects the WD Sentinel server to the network. • Configures the WD Sentinel server itself. This is a one-time procedure. • Completes product registration for the WD Sentinel server. • Joins the WD Sentinel server to the Domain.
Primary User Interface	• Signs in using the Administrator password (no username required).
Task Examples	• Manages WD Sentinel server settings, resolves any alerts, and monitors server performance. • Creates and manages iSCSI targets.

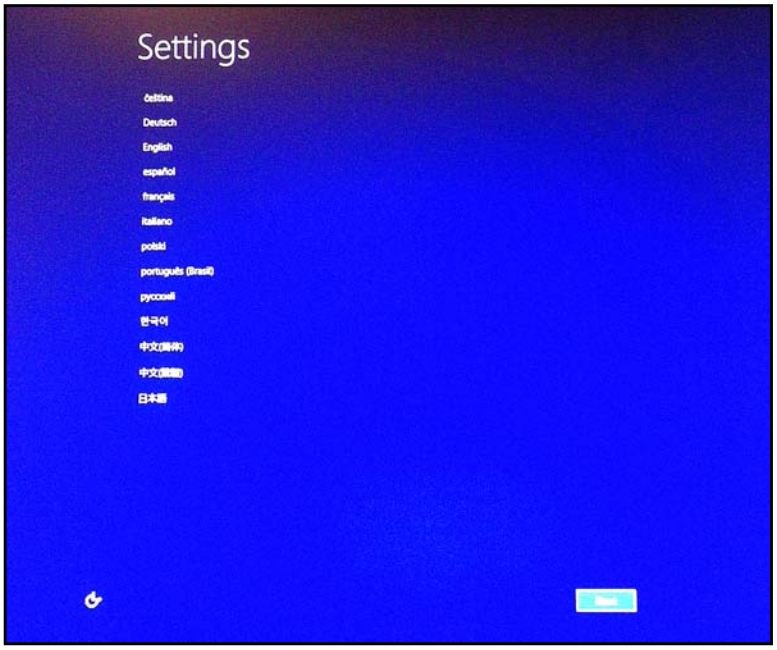
How the WD Sentinel Fits into Your Office



Connecting the WD Sentinel Server to Your Network

Use the following steps to physically connect your WD Sentinel DX4200 server to your network.

1. Connect your monitor to the VGA port on the rear of your WD Sentinel server.
2. Connect your USB keyboard and USB mouse to the USB ports on the back of your WD Sentinel server.
3. Using the provided ethernet cable, connect the WD Sentinel server (either ethernet port 1 or 2) to a DHCP-enabled LAN.
4. Using the provided AC adaptors, connect the WD Sentinel server to an electrical outlet or a UPS.
5. Turn on your monitor.
6. Press the power button on the front of your WD Sentinel unit.
   Once the WD Sentinel boot up process is complete, the Windows Storage Server Settings screen displays. The Power LED on the front of the WD Sentinel server will display a solid blue light.



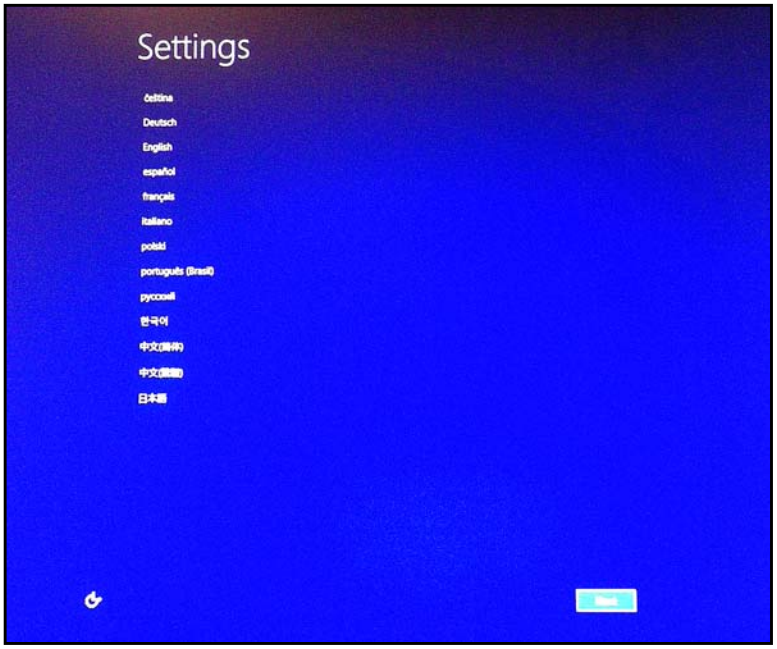
WARNING! **This process takes a few minutes. Do not interrupt the process. Do not power off or disconnect the WD Sentinel server.**

Setting up your WD Sentinel Server (one time only)

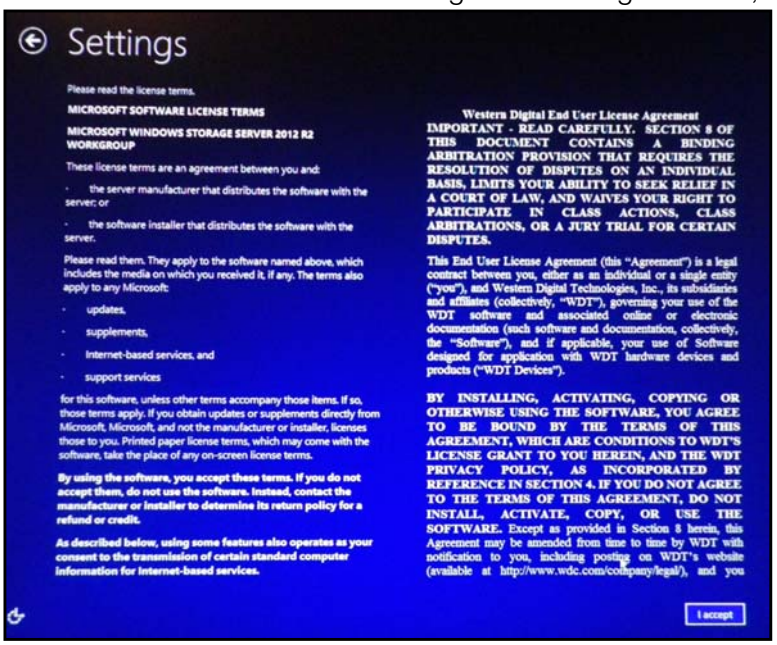
Your WD Sentinel server is now ready to be configured. This section describes how to use the one time setup wizard to configure your server for first use.

Important: Ensure that you complete the entire process outlined in steps 1- 11 below. If these steps are not followed, your WD Sentinel will not work properly.

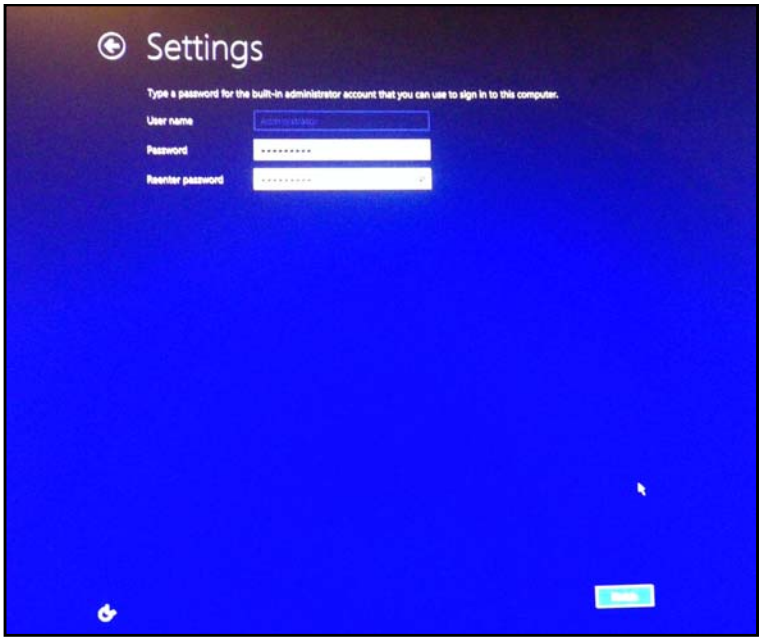
1. Select a language from the localization list,



2. Verify the localization settings or select the correct values from the drop-down lists, then click **Next**.
3. Read the Microsoft and Western Digital license agreements, then click **I accept**.


Settings
Please read the license terms.
MICROSOFT SOFTWARE LICENSE TERMS
MICROSOFT WINDOWS STORAGE SERVER 2012 R2 WORKGROUP
These license terms are an agreement between you and:
the server manufacturer that distributes the software with the server; or
the software installer that distributes the software with the server.
Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft:
updates,
supplements,
Internet-based services, and
support services
for this software, unless other terms accompany those items. If so, those terms apply. If you obtain updates or supplements directly from Microsoft, Microsoft, and not the manufacturer or installer, licenses those to you. Printed paper license terms, which may come with the software, take the place of any on-screen license terms.
By using the software, you accept these terms. If you do not accept them, do not use the software. Instead, contact the manufacturer or installer to determine its return policy for a refund or credit.
As described below, using some features also operates as your consent to the transmission of certain standard computer information for Internet-based services.
Western Digital End User License Agreement
IMPORTANT - READ CAREFULLY. SECTION 8 OF THIS DOCUMENT CONTAINS A BINDING ARBITRATION PROVISION THAT REQUIRES THE RESOLUTION OF DISPUTES ON AN INDIVIDUAL BASIS, LIMITS YOUR ABILITY TO SEEK RELIEF IN A COURT OF LAW, AND WAIVES YOUR RIGHT TO PARTICIPATE IN CLASS ACTIONS, CLASS ARBITRATIONS, OR A JURY TRIAL FOR CERTAIN DISPUTES.
This End User License Agreement (this "Agreement") is a legal contract between you, either as an individual or a single entity ("you"), and Western Digital Technologies, Inc., its subsidiaries and affiliates (collectively, "WDT"), governing your use of the WDT software and associated online or electronic documentation (such software and documentation, collectively, the "Software"), and if applicable, your use of Software designed for application with WDT hardware devices and products ("WDT Devices").
BY INSTALLING, ACTIVATING, COPYING OR OTHERWISE USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, WHICH ARE CONDITIONS TO WDT'S LICENSE GRANT TO YOU HEREIN, AND THE WDT PRIVACY POLICY, AS INCORPORATED BY REFERENCE IN SECTION 4. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT INSTALL, ACTIVATE, COPY, OR USE THE SOFTWARE. Except as provided in Section 8 herein, this Agreement may be amended from time to time by WDT with notification to you, including posting on WDT's website (available at http://www.wdc.com/company/legal/), and you
I accept

4. Enter and confirm the Administrator password (must be at least 8 characters long and contain at least three of the following categories: uppercase letters, lowercase letters, numbers, and symbols; spaces are allowed). You will use this user name and password later to connect to your WD Sentinel device to access the Administrator Dashboard.


Settings
Type a password for the built-in administrator account that you can use to sign in to this computer.
User name
Password
Reenter password

WARNING! **If you forget the Administrator password, it may not be possible to recover it, and you could potentially lose all of your data. Use the "WD Sentinel DX4200 Administrator Reference Sheet" on page 53 to record the password and keep it in a safe location.**

5. Click **Finish**. The installation begins. Once the initial process is complete, you'll see the WD Device Setup Wizard.

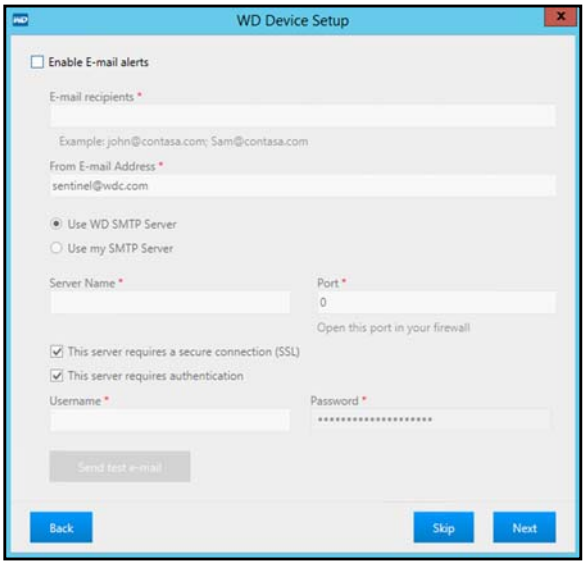
Important: This process can take 2 - 3 minutes. Do not interrupt the process. Do not power off or disconnect the WD Sentinel server.

6. Review the WD Device Setup screen, then click **Next**.

WD Device Setup
Welcome to WD Device Setup
WD Device Setup walks you through the following steps to configure your device:
1) Setup your e-mail notifications
2) Install WD Software Updates
3) Configure your storage
Cancel
Next

7. Select **Enable E-mail alerts** to send an email when an alert occurs on your device, then **complete the following fields**:

   Note: To skip this step, click **Skip**.



   a. **E-mail Recipient**: Enter the email addresses of those individuals who will receive an email from your WD Sentinel when an alert occurs.

   b. **From E-mail Address**: Enter the address from which the email will be sent. (e.g. server@contasa.com).

   c. Select one of the following options:

      - **Use WD SMTP Server**: Select this option to use the WD SMTP server for email.
      - **Use My SMTP Server**: Select this option to use your own SMTP server for email, then complete the following fields:
        - **Server Name**: Enter the name of your SMTP server.
        - **Port**: Enter the Port for your SMTP server.
        - **This server requires a secure connection (SSL)**: Select this option if the server requires a secure connection.
        - **This server requires authentication**: Select this option if the server requires authentication, then complete the following fields:
          - **Username**: Enter the authentication User Name for the identified server.
          - **Password**: Enter the authentication Password for the identified server.

   d. Select **Send test e-mail** to test the email you've set up for your alerts.

   e. Click **Next**.

8. Select the check box next to all updates on the screen, if updates are available, then click **Next**.

   Note: To skip this step, click **Skip**

   The Software update Status screen displays the progress of your update.

   When the update is finished, the following screen displays.

WD Device Setup
Configure Storage
Configure your drives in Server Manager using Storage Spaces. Open Server Manager and navigate to File and Storage Services -> Volumes -> Storage Pools
Launch Server Manager
Back
Finish

9. Click **Launch Server Manager** to begin configuring your WD Sentinel device using Storage Spaces. The Server Manager displays.
10. Follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure the WD Sentinel device using Storage Spaces.
11. Click **Finish** on the WD Device Setup to close the setup screen.

4 Managing the WD Sentinel Server

WD StorCentral
Shutting Down and Rebooting the Server

This chapter assumes you have followed the Administrator's Basic Install Guide to initialize the WD Sentinel server or have followed the steps outlined in “Connecting the Server and Getting Started” on page 12.

Important: As a best practice, perform the tasks outlined in this guide on a client computer using Remote Desktop, not directly from the WD Sentinel server.

WD StorCentral

WD StorCentral provides a window into your WD Sentinel device, allowing you to:

- View at-a-glance device information.
- Manage software updates.
- Get information on your device drives.
- View the health of your device.

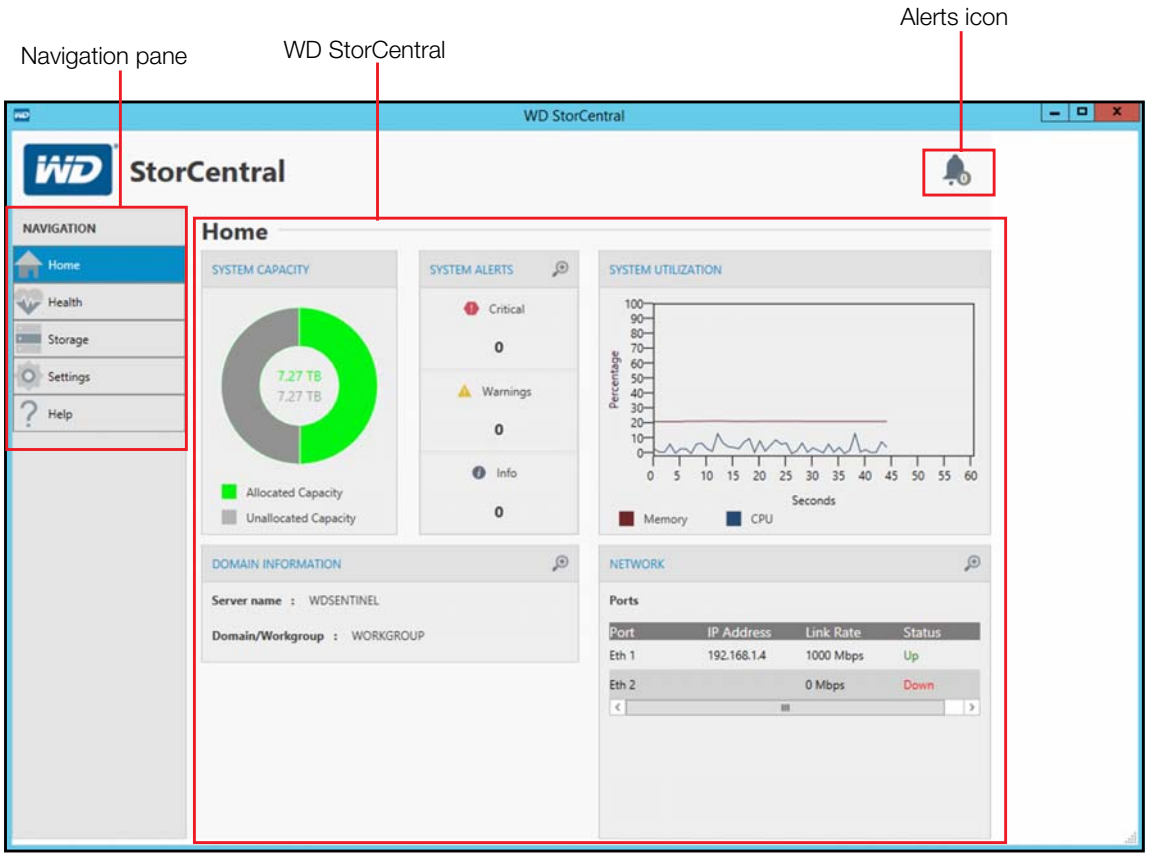
When you initially open WD StorCentral, the Home page provides at-a-glance device information and a Navigation bar. Use the following steps to access and use WD StorCentral.

Accessing WD StorCentral

To access WD StorCentral:

- On the Desktop, double-click the WD StorCentral icon.

The WD StorCentral Home page displays:



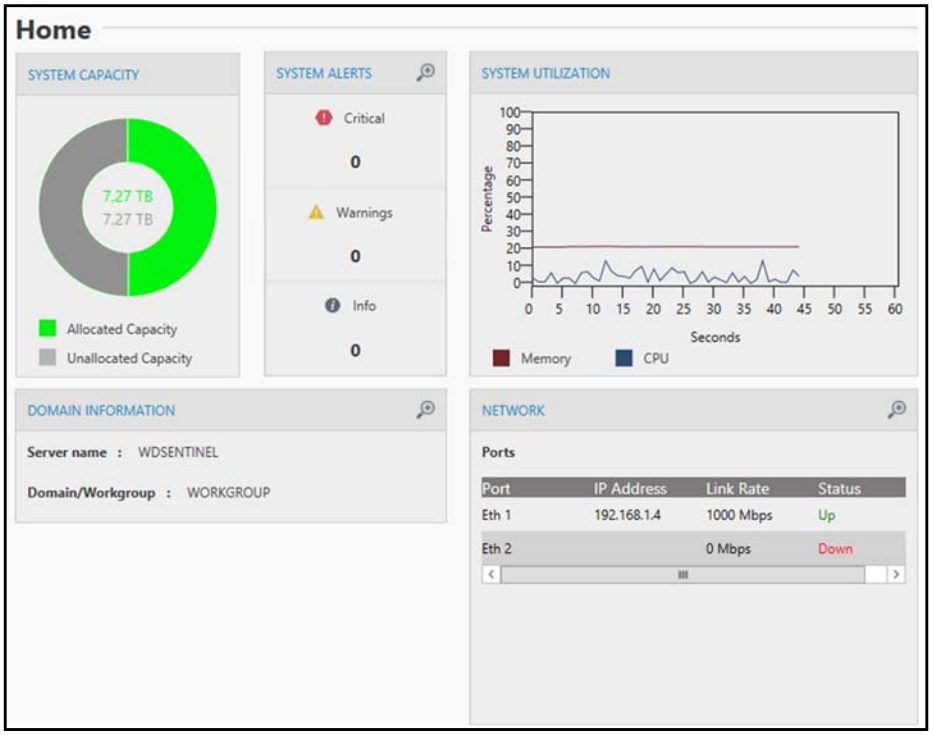
Navigation Bar

The Navigation Bar allows you to access the features available within WD StorCentral.

Navigation Task	Description
Home	The Home page provides at-a-glance information about your WD Sentinel device.
Health	The Health page allows you to monitor the status of the drives, power supplies, temperatures, fan, and CPU.
Storage	The Storage page allows you to view the status of your storage pools, perform disk management, and buy preferred drives for your device.
Settings	The Settings page allows you to register your device, enable and perform software updates, and setup email and audible alerts.
Help	The Help page provides ways to get additional help for your device.

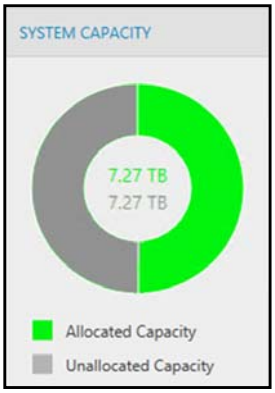
Home

The Home page provides at-a-glance data designed to give you the information you need to manage your device.



System Capacity

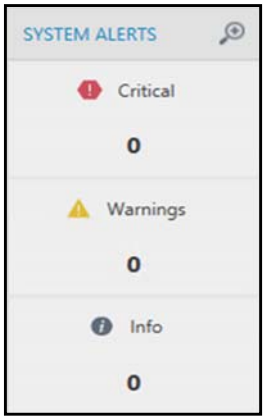
The System Capacity area provides the amount of allocated and unallocated capacity on your device. Allocated capacity displays in green; unallocated capacity displays in gray.



System Alerts

The System Alerts area identifies the number of system messages currently active on your device. There are 3 types of system alerts:

- **Critical**: Critical alerts are sent when an error or a problem occurs with your device, usually a system failure.
- **Warning**: Warning alerts present a condition that might cause a problem in the future.
- **Informational**: These alerts are updates on non-vital system information.



To view System Alert details:

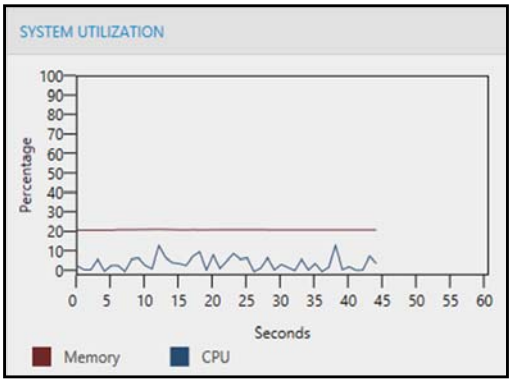
- Click the magnifying glass in the right corner of the System Alert area. The System Alerts screen displays.

To Save, Delete or Ignore a System Alert:

1. On the Home page, System Alerts area, click the magnifying glass in the right corner.
2. On the System Alerts screen, select the alert you'd like to save, delete, or ignore.
3. Click the **Save**, **Delete**, or **Ignore** button, depending on the action you'd like to perform on the alert.
4. Click **Close** to close the System Alerts screen.

System Utilization

The System Utilization graph displays the percentage of CPU and memory your device is currently using.



Domain Information

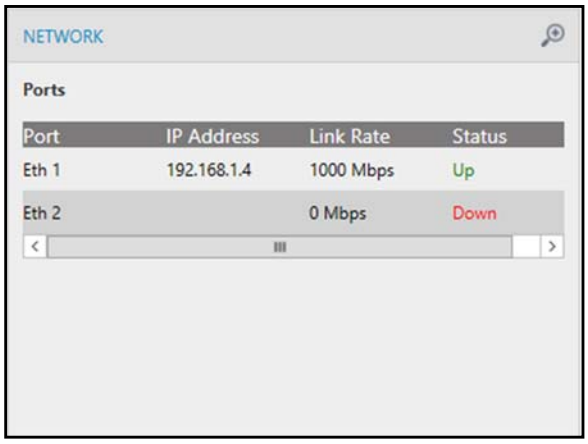
The Domain Information for your device displays in this area. This includes the server name and the domain name.

To view Domain details:

- Click the magnifying glass in the right corner of the Domain area. The System Properties dialog displays. From the System Properties dialog, you can update the Computer Name, set-up your device for remote access, manage devices on your server, and manage user profiles.

Network

The Network area displays the IP address, link rate, and status of your network connections for each active port.

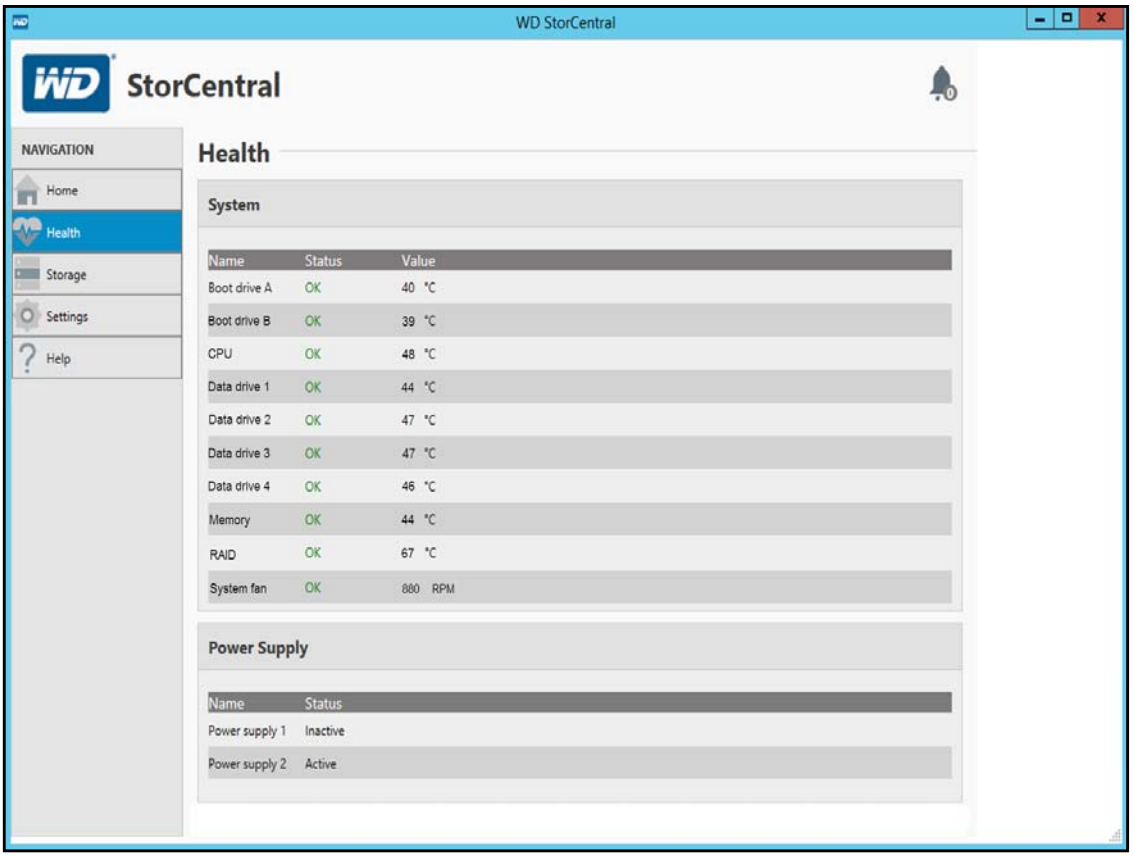


To view Network details:

- Click the magnifying glass in the right corner of the Network area. The Network Connections dialog displays.

Health Page

The Health page allows you to monitor the temperature of the boot drive, storage drives and CPU, identifies power supply activity, and indicates the speed of the fan. The Health page is divided into two areas: System and Power Supply. To open the **Health** Page, click the **Health** tab on the Navigation bar.



System

The System area displays the status and temperature of the boot drive, storage drives, boot drive RAID control, memory, and CPU. It also displays the system fan RPMs.

System Settings	Description
Name	The name of the system component (e.g., fan, drive, CPU).
Status	The status of the identified system component. The status may be: • **OK** • **Unknown**: This normally occurs when the server is attepmting to obtain system information. • **Failed**
Value	The value associated with the system component. • For CPU, Memory, and data drives, the value is the temperature of the component. • For system fan, the value is rotations per minute (RPM).

Power Supply

The Power Supply area displays the status and the on/off value for each power supply.

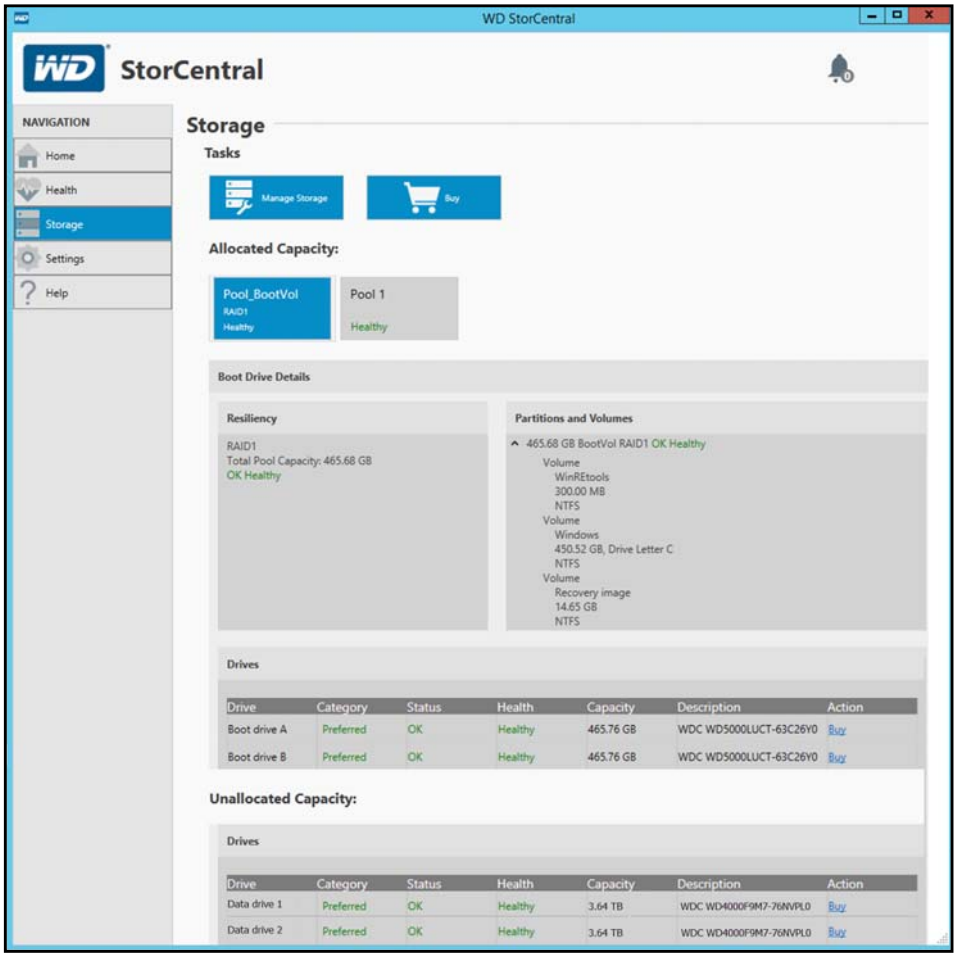
Power Settings	Description
Name	The name of the power supply component (e.g., Power supply 1, Power supply 2).
Status	The status of the identified power supply. The status may be: • **Active** • **Inactive**

Storage

The Storage page allows you to:

- Manage the data drives through the Server Manager application.
- Buy replacement storage from the WD Store.
- View the hard drive properties and health.

To open the **Storage** Page, click **Storage** on the Navigation bar.



Managing Storage

The WD Sentinel server drives are managed using *Server Manager.* The *Server Manager* console provides you with a consolidated view of the server, including information about server configuration, status of installed roles, and links for adding and removing roles and features. For additional information, see the *Microsoft Server Manager Online Help*.

Accessing Server Manager:

- On the Storage page, click **Manage Storage**.

Buy

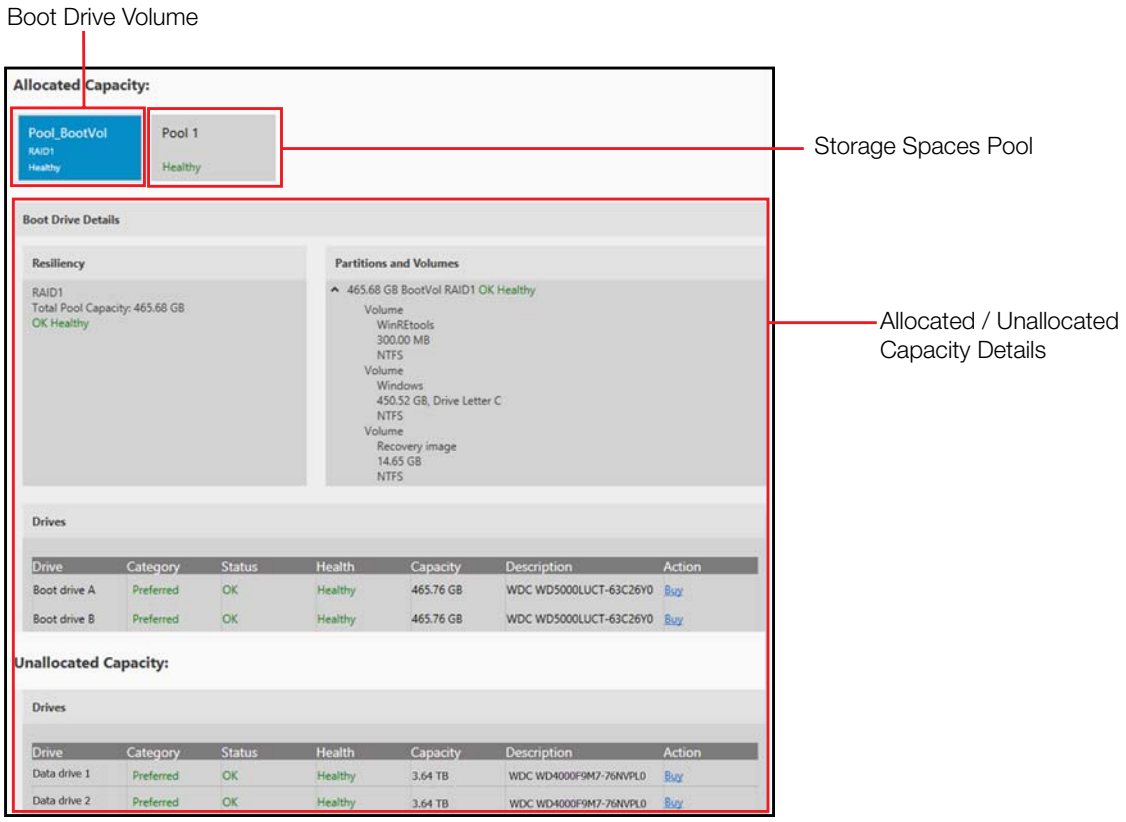
The Buy button allow quick access to the WD Store where you can access drives that are compatible with your device.

Accessing the WD Store:

- On the Storage page, click **Buy**.

Allocated / Unallocated Capacity

The Allocated Capacity and Unallocated Capacity areas provides information about the allocated /unallocated portion of your device drives.



Boot Drive Volume / Storage Spaces Pool

This area identifies the boot drive volume and storage pools currently available on your device. These areas identifies the name of the volume / pool, the RAID level (if applicable), and the health of the pool.

- To access the details of each volume / pool, click the volume / pool you'd like to view.

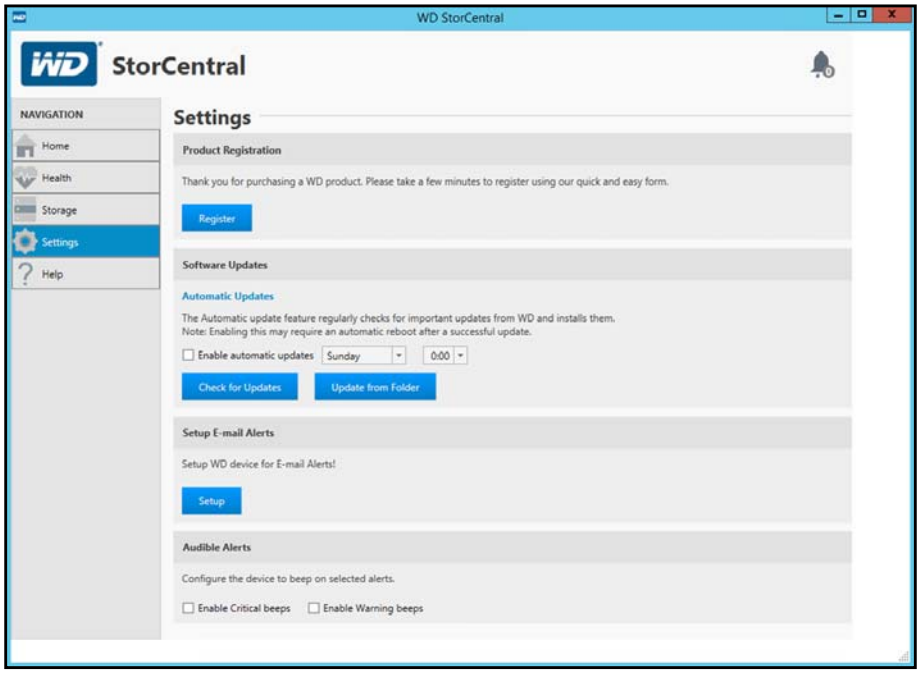
Allocated / Unallocated Capacity Details:

Provided below is a description of the information available in the Allocated Capacity Details and the Unallocated Capacity Details areas:

Details	Description
Resiliency	• **RAID level:** This area identifies the RAID level for the boot drive. • **Total Pool Capacity**: Displays the total capacity of the selected pool. The health of the pool displays at the bottom of this area.
Partitions and Volumes	This area displays the partitions and volumes that currently exist on the selected pool. • Click the arrow to expand or contract this area. The health of the partition and volumes displays also displays in this area.
Drives	The Drives area displays the following information related to the drives associated with the selected pool. • **Drive**: The name of the drive. • **Category**: Identifies the type of drive being used by your device: - **Preferred**: Indicates that this is a preferred drive. Preferred drives perform optimally with your device and should always be used whenever possible. Preferred drives are fully tested and approved for use with your device. The message text displays in **green**. - **Supported**: Indicates that this is a supported drive. Supported drives are not the optimal drives for your device but are part of the same drive family. These drives are not fully tested with this device. The message text displays in **green**. - **Unsupported**: Indicates that this is an unsupported drive. Unsupported drives have not been tested with this device and should be used at your own risk. The message text displays in **red**. **WARNING! WD is not responsible for data loss due to the use of unsupported drives.** • **Status**: The status of a drive may be: - **OK** - **Degraded** - **Warning** - **In Service** - **Predicted Failure**: Visit WD Store to replace **CAUTION!** Imminent failure detected. Please replace this hard drive immediately. • **Spares**: Indicates whether the drive has been set up as a Hot Spare which will automatically replace a failed disks in a storage pool. • **Health**: The health of the drive may be: - **Healthy** - **Degraded** - **In Service** - **Predictive Failure**: Visit WD Store to replace • **Capacity**: The drive capacity. • **Description**: The drive description • **Action**: Action that can be performed on the identified drive. - **Buy**: Click **Buy** to purchase a Preferred WD Drive.

Settings

The Settings Page allows you to register your device, update the device software, and set up audible and email alerts. To open the **Settings** Page, click **Settings** on the Navigation bar.



Product Registration

The Product Registration area allows you to register your device with WD. Registering your device allows you to get the latest updates and special offers.

To register your device:

1. On the Settings page, click **Register**.
2. Complete the following fields on the WD Registration dialog:
   - **First Name, Last Name**: Enter your first and last name.
   - **E-mail, Confirm E-mail**: Enter your contact email, then reenter your email to confirm that it is correct.
   - **Partner ID**: Enter your Partner ID, if you have one.
   - Select the **Keep me up to date with important product updates and other information** checkbox.
3. Click **Finish**.

Software Updates

Periodically, WD issues software updates for your WD Sentinel server. The Software Update area allows you to update WD Sentinel device software automatically or manually. Please note that this area only allows you to apply software updates issued by WD.

A best practice to ensure that your system software stays current is to enable automatic updates on your WD Sentinel server (See "Automatic Updates of WD Software" on page 28).

Note: If your boot drive is rebuilding, the software will not allow you to update your device until the rebuild is complete.

Manual Updates of WD Software

To check for software updates:

1. In the **Software Updates** area, click **Check for Updates**.
   - If a software update is available, click **Install Update**.
   - If there is no software update, click **Cancel**.

To update from a file:

1. Software update files can also be downloaded from the WD Support site at *http://support.wd.com*.
2. Once you download the available firmware updates for the WD Sentinel server, unzip the file to a folder on the server.

   Note: Do not uses spaces when creating your folder name.

3. In the Software Updates area, click **Update from Folder**.
4. Locate the saved firmware update file on the server (folder name will be AllPackages), then click **OK**. The system applies the software update.
   - If a system reboot is necessary, you will be required to manually restart your server (See "Shutting Down and Rebooting the Server" on page 31).

Automatic Updates of WD Software

Enabling **Automatic Updates** on your WD Sentinel server causes the server to check for available software updates from WD on a scheduled basis and applies the update automatically.

To set a schedule for automatic updates:

1. In the **Automatic Updates** area, click **Enable automatic updates**.
2. Select the day and time you want the WD Sentinel server to check for updates every week, and if an update is available, install it. (Example: every Sunday at 3:00 AM)
   - If a system reboot is necessary, you will be required to manually restart your server (See "Shutting Down and Rebooting the Server" on page 31).

Setup Email Alerts

Receiving email alerts allows you to monitor certain server issues as they occur.

To setup email alerts:

1. In the Setup E-mail Alerts area, click **Setup**.
2. Select **Enable E-mail alerts** to send an email when an alert occurs on your device, then complete the following fields:
   a. **E-mail Recipient**: Enter the email addresses of those individuals who will receive an email from your WD Sentinel when an alert occurs.
   b. **From E-mail Address**: Enter the address from which the email will be sent. (e.g. server@contasa.com).
   c. Select one of the following options:
      - **Use WD SMTP Server**: Select this option to use the WD SMTP server for email.
      - **Use My SMTP Server**: Select this option to use your own SMTP server for email, then complete the following fields:
        - **Server Name**: Enter the name of your SMTP server.
        - **Port**: Enter the Port for your SMTP server.
        - **This server requires a secure connection (SSL**): Select this option if the server requires a secure connection.
        - **This server requires authentication**: Select this option if the server requires authentication, then complete the following fields:
          - **Username**: Enter the authentication User Name for the identified server.
          - **Password**: Enter the authentication Password for the identified server.
3. Select **Send test e-mail** to test the email you've set up for your alerts.
4. Click **Save**.

Audible Alerts

The Audible Alert provides aural notification from your WD Sentinel server when there are warnings or critical alerts to the server.

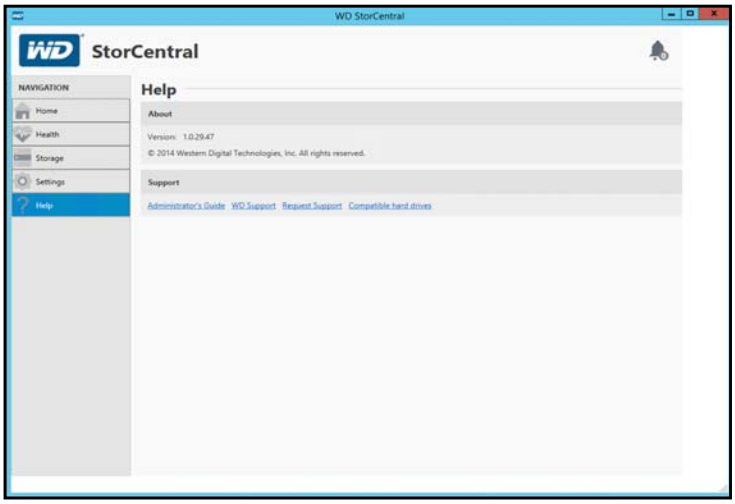
To set and disable audible alerts:

1. In the Audible Alerts area, click the checkbox next to the type of alert for which you'd like to hear an alarm.
   - **Enable Critical beeps**: The alarm sounds for all critical alerts.
   - **Enable Warning beeps**: The alarm sounds for all warning alerts.

   Your audible alarm has been set. When an alert of the type you selected occurs, an audible sound will emit from your WD Sentinel server.
2. To disable Audible Alerts, deselect the checkbox next to the alarm you'd like to disable.

Help

The Help page identifies the software version, copyright information, and ways for you to get help for your device. To open the **Help** Page, click **Help** on the Navigation bar.



About

The About area identifies the current version of the software.

Support

The Support area provides several options for obtaining assistance for your WD Sentinel DX4200 device.

To access WD Customer Support:

1. Click **Request Support**. The Request Support window displays.
2. After reading the information on the screen, click the "**I agree and would like to proceed.**" check box, then click **Proceed**. The WD Support Ask a Question page displays.

   Note: The first time you do this, an Internet Explorer Security Screen displays. Clear the check box and click **Close**.

3. Complete the online form and click **Submit Question**. A diagnostic report of the WD Sentinel server automatically attaches to the form. Your request is added to the WD Support queue and assigned a confirmation number. You will receive an email from WD Support regarding your question.

Important: For faster service/phone service, call WD Support. For the latest phone numbers and contact information in your region, see "Contacting WD Technical Support" on page iii or *http://support.wd.com*. Have your confirmation number ready when you call.

To view a list of compatible drives for your device:

- Click **Compatible hard drives**. The current list of compatible hard drives displays in your browser.

Shutting Down and Rebooting the Server

The WD Sentinel server is intended to be on at all times, providing shared data. A best practice is to avoid turning the unit off. However, if it does become necessary (for example, moving the server to a different location or performing a software update), follow the procedures below to shut down or restart the server.

It is very important that the WD Sentinel server be shut down or restarted in a clean and graceful manner through the Windows Settings function.

WARNING! **To avoid a potentially unclean shutdown that could corrupt the configuration, shut down the server through Windows Settings.**

To shut down or restart the WD Sentinel device (Preferred method):

1. On the Windows desktop, move your mouse to the lower right-hand corner of the screen and click the **Settings** button.
2. Click **Power**, then select **Shut down or Restart.**
3. From the pull-down menu, select a reason for your shut down or restart, then click **Continue**.

Note: You can also shut down your WD Sentinel server by double-tapping the power button on the front of the device. The “Shutting Down” message displays on the front of the unit.

5

Managing Storage on the WD Sentinel Server

Storage Spaces
Setting Up Your Drives
Recovering from a Failed Drive

Storage Spaces

Storage Spaces is a Windows storage virtualization technology which succeeds Logical Disk Manager and allows for the organization of physical disks into logical volumes similar to Logical Volume Manager (Linux) or RAID levels 0, 1, 5, and 10, but at a higher abstraction level.

A Storage Space behaves like a physical disk to the user, with optional thin provisioning. The spaces are organized within a storage pool, i.e. a collection of physical disks, that can span multiple disks of different sizes, performance or technology (USB, SATA). The same storage pool can host multiple storage spaces. Storage Spaces have built-in resiliency from disk failures, which is achieved by either disk mirroring or striping with parity across the physical disks.

Setting Up Your Drives

Follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure and setup Storage Spaces on your WD Sentinel device.

Recovering from a Failed Drive

The WD Sentinel server lets you know when a drive fails in the following ways:

- The LED above the bad drive is solid red.
- The Power LED on the WD Sentinel server flashes red, indicating a serious fault.
- An email Alert is posted if you have set it up to do so. (See “Setup Email Alerts” on page 29.)

To recover from a failed drive:

1. Replace the drive (the one with the red LED over the drive) with an approved drive for the WD Sentinel server (See “To view a list of compatible drives for your device:” on page 30.)
2. Once replaced, follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure the WD Sentinel device using Storage Spaces.

6

Best Practices

Setting up the WD Sentinel Server
Using the WD Sentinel Server Efficiently
Replacing Drives
Shutting Down

The following practices help you use the WD Sentinel server and protect your data efficiently and safely.

Setting up the WD Sentinel Server

- Change the default name of WD Sentinel to something unique. This avoids conflicts when another WD Sentinel server is added to your network in the future.
- Make sure Ethernet 1 and Ethernet 2 are on the same network subnet.
- Add the server to your domain. This allows users to use the same login and password.
- Make sure the password is stored in a safe place.
- Set user password policy to at least medium security.
- Enable Microsoft Automatic Updates to find and apply the latest Microsoft software update.
- Enable WD Automatic Updates to find and apply the latest WD software update.
- Set up Automatic Alert Notification for real-time notifications of any problems with the WD Sentinel server.
- **Do not remove the Windows page file!** Some critical functions use the system's paging file. Removing the page file can potentially leave your system unusable with the possibility of data loss. To maintain the reliability of your system and its redundant resources, do not modify the paging file whatsoever.

Using the WD Sentinel Server Efficiently

- The WD Sentinel server has many jobs to perform. Share data during business hours, and back up the computers during hours of inactivity. Keep the server powered on 24/7 to do its work.
- Always use the WD Sentinel device with a UPS.
- Enable email alerts. Receiving your alerts by email allows you to monitor certain server issues as they occur.

Replacing Drives

- When a data drive is removed, Storage Spaces will be degraded if another data drive fails or is removed. Only remove one drive at a time between rebuilds. Once a failed drive is replaced, manually rebuild the drive using Server Manager.
- Avoid pulling a drive out unless there is a failure.
- When a data drive needs replacement, the WD Sentinel server is still functional but is subject to a second drive failure that would result in the loss of data. To minimize this vulnerable time, a good practice is to have another drive ready to replace the failed drive.

Shutting Down

- Unclean shutdowns are hard on your system. To assure that the unit always experiences clean shutdowns and the best data integrity, use an Uninterruptible Power Supply (UPS).
- To avoid possible corruption, do not unplug the power from the unit while it is running.

7

Troubleshooting

First Steps Checklist
Specific Problems and Corrective Actions

For any issue, first ensure that you are using the latest firmware for the WD Sentinel server. See “Software Updates” on page 28 for instructions.

First Steps Checklist

- Is the power supply plugged in to the wall outlet and the server?
- Are all cables correctly connected and secured?
- Is the power on? If not, see “LEDs” on page 10.

Specific Problems and Corrective Actions

The following section contains specific problems that may arise during the use of the WD Sentinel server and provides possible solutions.

LEDs do not light up

1. Make sure the power cord is connected correctly.
2. Make sure that the wall outlet has power. Test it by plugging in another device.
3. Confirm the network cable is properly connected to the WD Sentinel server and the network switch or router.
4. Make sure the network switch or router has power.
5. Use a different network cable and port on the network switch or router. Temporarily swapping the WD Sentinel’s cable port with a working network device may identify any failing cables and ports.

LCD Messages

The LCD displays various messages for you to review. Provided below is a list of messages, a description of the message and possible responses for that message.

LCD	Description	Troubleshooting
<Host Name>	Displays the name of your WD Sentinel server.	N/A
<IP Address>	Displays the IP address of your WD Sentinel server.	If the IP address does not display, ensure that your device is connected by ethernet cable to your router.
BIOS Corrupted	Your BIOS is corrupted	Contact *Technical Support* for assistance.
BIOS Degraded	Your BIOS is degraded	The system is unable to boot from the primary BIOS and is currently running on the secondary BIOS.

LCD	Description	Troubleshooting
BIOS Repaired Reboot Required	Your system is currently running on the secondary BIOS. A reboot is required to attempt a repair of your BIOS.	Your system is running on the secondary BIOS. An attempt will be made during the reboot to run the system on the primary BIOS.
BIOS Updated Reboot Required	The primary BIOS has been updated, A system reboot is required.	Reboot the system. This allows the updated BIOS to take affect.
BIOS Updating	The BIOS is updating.	Your system BIOS is currently updating. Do not disconnect the power or interrupt the process until the update is complete.
Boot Drive <Drive Name> Over Temp	The operating system (OS) boot drive has exceeded the normal operating temperature.	Check the airflow around your device and the system fan operation.
Boot Volume Degraded	One of the operating system (OS) drives has failed. The system will operate but in a degraded state.	Replace the identified boot drive. • Access WD StorCentral (See "WD StorCentral" on page 18). • Click **Storage** on the navigation bar. • In the Allocated Capacity area, select your boot drive. • In the Action column, select **Buy**. • Obtain and install a compatible boot drive.
Drive Count	Displays the number of drives currently on your device.	The total drive count in the system. This includes the boot drive(s) and the data drives.
Drive Failed	One of the data drives failed.	Your boot drive(s) is currently running in RAID protection mode. Replace the failed drive. • Access WD StorCentral (See "WD StorCentral" on page 18). • Click **Storage** on the navigation bar. • In the Allocated Capacity area, select the failed drive. • In the Action column, select **Buy**. • Obtain and install a compatible boot drive.
Drive Over Temp	The data drive has exceeded the normal operating temperature.	Check the airflow around your device and the system fan operation.
Ethernet <port #> Disconnected	Ethernet port 1 or port 2 is disconnected.	Reconnect the ethernet cable to the identified port.
Fan Failed	The system's fan has failed.	The fan has failed. Replace the failed fan.

LCD	Description	Troubleshooting
Imminent Drive Failure	S.M.A.R.T early detection found a premature drive failure condition on one of the data drives.	Replace the defective drive as soon as possible to stop RAID from going into a degraded state.
Imminent Failure Boot Drive <Drive Name>	S.M.A.R.T early detection found a premature drive failure condition on one of the boot drives.	Replace the defective drive as soon as possible to stop RAID from going into a degraded state.
Invalid Drive	The inserted drive is not compatible with the device.	Replace the inserted drive with an approved drive. For a complete list of approved drive models, search for Answer ID 9443 in the WD Knowledge Base at *http://support.wd.com*.
Invalid Drive Capacity	The new drive capacity is either greater or smaller than the drive you replaced.	Replace the inserted drive with a drive that has the correct drive capacity.
Network Disconnected	The ethernet port does not have network activity.	Restore network connectivity.
Power Supply <Supply #> Failed	Power supply 1 or 2 failed.	Replace the defective power supply. • Access WD StorCentral (See "WD StorCentral" on page 18) • Click **Health** on the navigation bar. • Check the Power Supply area to review the status of your power supply. • Obtain and install a compatible power supply.
Reboot Required	The system requires a reboot.	Safely reboot the system.
Software Update Complete	The software update process is complete.	Check the System Alerts in WD StorCentral to verify the completion of the software update.
Software Update Downloading	A software update is being downloaded to the system.	Allow the process to fully complete. No action is required.
WD Software Update Available	There is a WD software update available for download.	See "Software Updates" on page 28 to access and perform the update.
WD Software Update Failed	The WD software update failed.	Repeat the Software update process again.

8

Regulatory and Warranty Information

Regulatory Compliance
Limited Warranty

Regulatory Compliance

FCC Class B Information

Operation of this device is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This device has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet or a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by WD could void the user's authority to operate this equipment.

Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

ICES/NMB-3 (B) Compliance

Cet appareil de la classe B est conforme à la norme NMB-3 (B) du Canada.

This device complies with ICES-3 (B).

Safety Compliance

Approved for US and Canada. CAN/CSA-C22.2 No. 60950-1: Safety of Information Technology Equipment.

Approuvé pour les Etats-Unis et le Canada. CAN/CSA-C22.2 No. 60950-1: Sûreté d'équipement de technologie de l'information.

This product is intended to be supplied by a listed limited power source, double insulated, or direct plug-in power unit marked “Class 1.”

CAUTION! Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Dispose of used batteries according to manufacturer’s instructions.

CE Compliance for Europe

Verified to comply with EN55022 for RF emission; EN-55024 for Generic Immunity, as applicable; and EN-60950-1 for Safety.

KC Notice (Republic of Korea only)

기종별	사용자 안내문
B 급기기 (가정용방송통신기자재)	이기기는가정용(B 급) 전자파적합기기로서주로 가정에서사용하는것을목적으로하며, 모든지역에 서사용할수있습니다

Class B Device 1 Please note that this device has been approved for non-business purposes and may be used in any environment, including residential areas.

Korean KCC certification ID: MSIP-REM-WDT-D8C

Сведения для Таможенного Союза (только для России)

Координаты для связи по вопросам Таможенного Союза:

ООО «Дофин»
Россия, 140573, Московская область, Озерский район, село Бояркино
Голубова Л.Н.
+7 495 223 6008
local.declarant@gmail.com

Дата изготовления указана на маркировке оборудования.

(Manufacturing date marked on the equipment.)

VCCI Statement

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。
取扱説明書に従って正しい取り扱いをして下さい。 VCCI－B

Environmental Compliance (China)

部件编号	铅（Pb）	水银（Hg）	镉（Cd）	六价铬（Cr(VI)）	多溴联苯（PBB）
PCBA	X	○	○	○	○
适配器	X	○	○	○	○
RJ45 电缆	○	○	○	○	○
螺丝	○	○	○	○	○
橡胶垫	○	○	○	○	○
金属	○	○	○	○	○
塑料	○	○	○	○	○

○：表示部件中不包含相应的物质，或者含量没有超出 SJ/T 11363-2006 法规中规定的同类物质的最大允许水平。
X：表示部件中相应物质的含量超出 SJ/T 11363-2006 法规中规定的限度

Obtaining Service

WD values your business and always attempts to provide you the very best of service. If this Product requires maintenance, either contact the dealer from whom you originally purchased the Product or visit our product support website at *http://support.wd.com* for information on how to obtain service or a Return Material Authorization (RMA). If it is determined that the Product may be defective, you will be given an RMA number and instructions for Product return. An unauthorized return (i.e., one for which an RMA number has not been issued) will be returned to you at your expense. Authorized returns must be shipped in an approved shipping container, prepaid and insured, to the address provided on your return paperwork. Your original box and packaging materials should be kept for storing or shipping your WD product. To conclusively establish the period of warranty, check the warranty expiration (serial number required) via *http://support.wd.com*. WD shall have no liability for lost data regardless of the cause, recovery of lost data, or data contained in any Product placed in its possession.

Limited Warranty

WD warrants that the Product, in the course of its normal use, will for the term defined below, be free from defects in material and workmanship and will conform to WD's specification therefor. The term of your limited warranty depends on the country in which your Product was purchased. The term of your limited warranty is for 2 years in the North, South and Central America region, 2 years in the Europe, the Middle East and Africa region, and 2 years in the Asia Pacific region, unless otherwise required by law. The term of your limited warranty period shall commence on the purchase date appearing on your purchase receipt. WD may at its discretion make extended warranties available for purchase. WD shall have no liability for any Product returned if WD determines that the Product was stolen from WD or that the asserted defect a) is not present, b) cannot reasonably be rectified because of damage occurring before WD receives the Product, or c) is attributable to misuse, improper installation, alteration (including removing or obliterating labels and opening or removing external enclosures, including the mounting frame, unless the product is on the list of limited user-serviceable products and the specific alteration is within the scope of the applicable instructions, as found at *http://support.wd.com*, accident or mishandling while in the possession of someone other than WD. Subject to the limitations specified above, your sole and exclusive warranty shall be, during the period of warranty specified above and at WD's option, the repair or replacement of the Product with an equivalent or better Product. The foregoing warranty of WD shall extend to repaired or replaced Products for the balance of the applicable period of the original warranty or ninety (90) days from the date of shipment of a repaired or replaced Product, whichever is longer. The foregoing limited warranty is WD's sole warranty and is applicable only to products sold as new. The remedies provided herein are in lieu of a) any and all other remedies and warranties, whether expressed, implied or statutory, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and b) any and all obligations and liabilities of WD for damages

including, but not limited to accidental, consequential, or special damages, or any financial loss, lost profits or expenses, or lost data arising out of or in connection with the purchase, use, or performance of the Product, even if WD has been advised of the possibility of such damages. In the United States, some states do not allow exclusion or limitations of incidental or consequential damages, so the limitations above may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

9

Appendix

Hardware Replacement Procedures
WD Sentinel DX4200 Administrator Reference Sheet

Hardware Replacement Procedures

Before You Begin
Replacing a Hard Drive
Removing the Unit Cover
Replacing the SODIMM Memory Module
Adding a Boot Drive

This chapter provides the steps necessary to replace the following components designed for replacement for the WD Sentinel DX4200.

- Hard Drive
- Fan
- SODIMM Memory Module
- Power Supply
- Boot Drive

Before You Begin

- Ensure that you have the correct replacement unit.
- Review the procedures before beginning to replace a part.

Replacing a Hard Drive

It is simple to replace a drive in your WD Sentinel server. First, make sure to go to the WD Store to purchase a compatible replacement drive. For a complete list of approved drive models, search for Answer ID 9443 in the WD Knowledge Base at *http://support.wd.com*.

1. The drives in the WD Sentinel server are “hot swappable.” This means that the WD Sentinel server can remain powered on while you replace the drive.
2. Once replaced, follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure the WD Sentinel device using Storage Spaces.

Drive Categories

Provided below is a description of the category of hard drives you can use to replace an existing drive. The type of drive used in your device can be found on the WD StorCentral Storage page in the Catagory column.

Hard Drive Catagory	Description
Preferred	Preferred drives preform optimally with your device and should always be used whenever possible. Preferred drives are fully tested and approved for use with your device.
Supported	Supported drives are not the optimal drives for your device but are part of the same drive family. These drives are not fully tested with this device.
Unsupported	Unsupported drives have not been tested with this device and should be used at your own risk. The LED on the front of your device is Red. **WARNING! WD is not responsible for data loss due to the use of unsupported drives.** Unsupported drives must be enabled before the drive can be used with your device. If you choose to use an unsupported hard drive, use the following steps after the drive has been replaced in the device to enable the drive. *Note:* There are certain unsupported hard drives that you cannot enable. For those drives, there is a **Learn More** link with information on how to obtain a WD preferred drive. 1. Access WD StorCentral. 2. On the Navigation bar, select **Storage**, if not already selected. 3. In the Unallocated Capacity area, click the box identifying the unsupported drive. Unsupported displays in red in the Category column of the Unallocated Capacity Details area. 4. Click **Enable**, located to the Action column. 5. Read the alert disclaimer, then select **Yes** if you’d like to enable your current unsupported drive. 6. Follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure the WD Sentinel device using Storage Spaces.

What you'll Need:

- Replacement hard drive

Replacing a Hard Drive

Use the following steps to replace a drive in your WD Sentinel server.

1. Unlock and open the drive door (Figure 1).

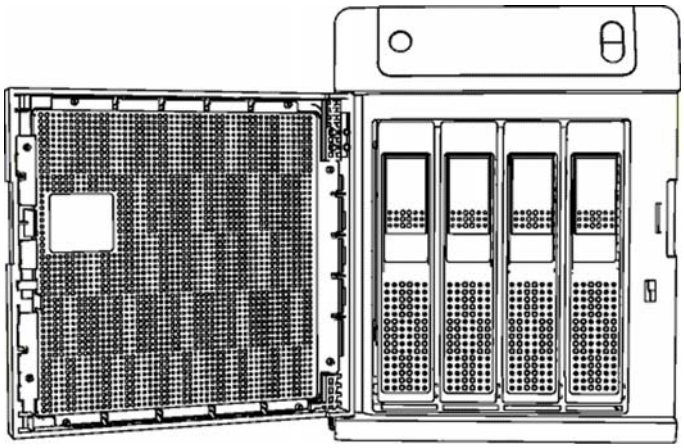


Figure 1. Open drive door

2. For a failed drive, verify that the LED for the failed drive is solid red.
3. Pull the handle on the front of the hard drive toward you.
4. When it snaps open, pull the hard drive toward you to remove it. (Figure 2).

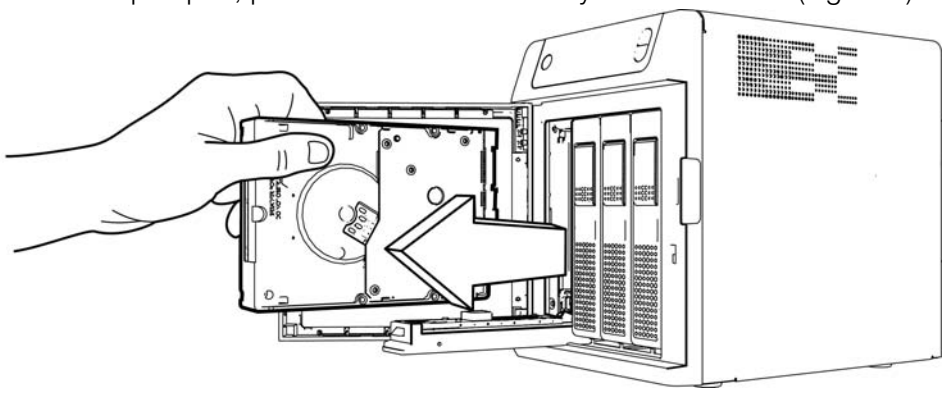


Figure 2. Remove hard drive

5. Slide the approved replacement drive into the drive bay, making sure that it is properly seated and is facing the correct direction.

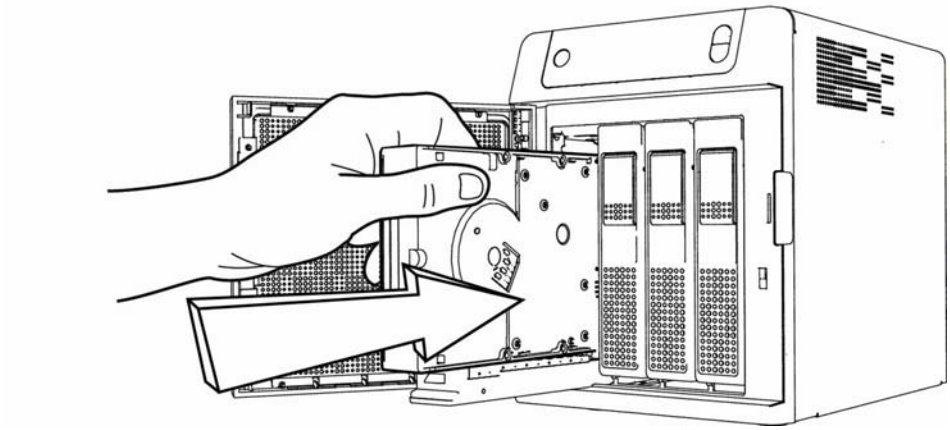


Figure 3. Replace hard drive

6. Using some force, snap the drive handle shut.
7. Close and lock the door on the front of the server, making sure it snaps shut.
8. Follow the steps outlined by in the *Microsoft Storage Server Online Help* to configure and setup your new data drive.

Replacing a Server Fan

When a fan requires replacement, you will receive an email Alert indicating that there is a problem with the WD Sentinel server fan.

The fan in the WD Sentinel server are “cold swappable.” This means that the WD Sentinel server must be shut down prior to your fan replacement. To shut down your WD Sentinel server, follow the steps outline in “Shutting Down and Rebooting the Server” on page 31.

Important: To avoid electrostatic discharge (ESD) problems, ground yourself by touching metal before handling the device.

What you’ll Need:

- Phillips screwdriver
- Replacement server fan

Replacing a Server Fan

1. Shut down the server.
2. Disconnect all external connections.
3. Place the unit on a clean and stable surface.
4. On the back of the unit, loosen and remove the four (4) Fan Plate mounting screws (Figure 5).

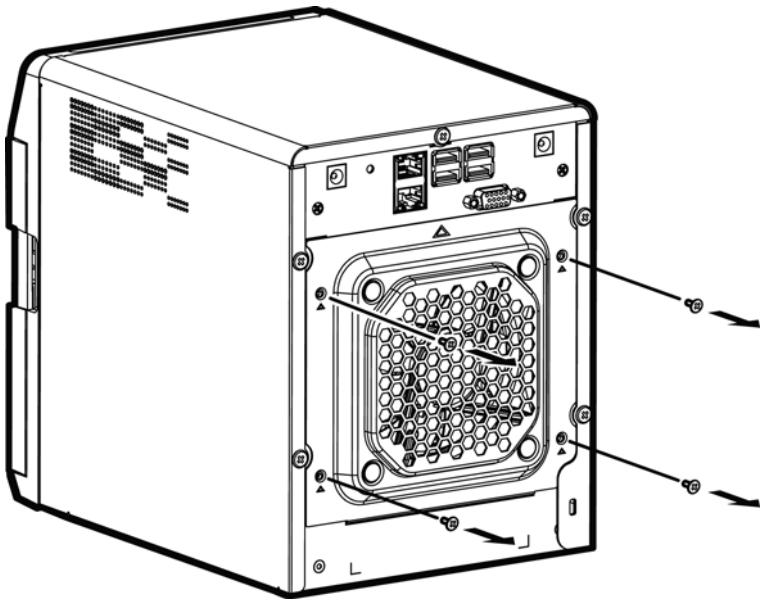


Figure 4. Remove Fan Plate mounting screws

5. Carefully lower the fan plate toward you then lift the fan plate out of the unit (Figure 5).

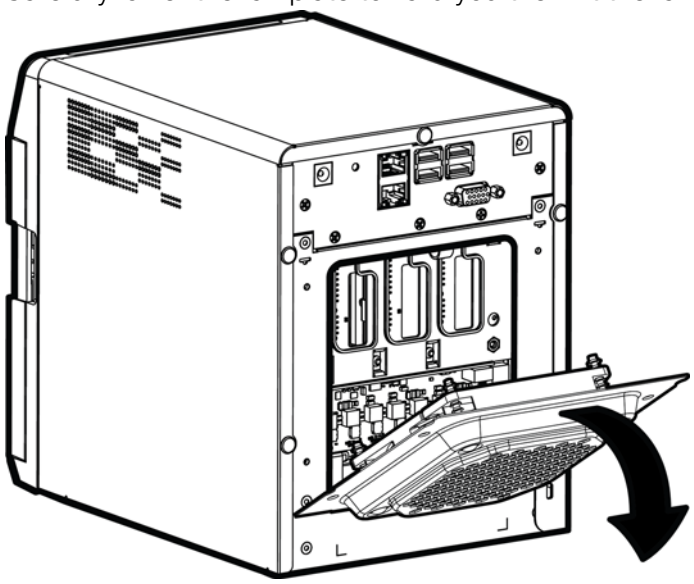


Figure 5. Remove fan

WARNING! Before removing the fan plate completely from the unit, detach the fan interface connector from the back plane PCBA.

6. Gently place the replacement fan into the unit, ensuring that the orientation of the fan is correct and that the fan interface connector is connected.
7. Replace and tighten the four (4) Fan Plate mounting screws.
8. Do not over-tighten the mounting screws.
9. Reconnect all of the cables for the device.
10. Restart the server.

Important: Do not disassemble the fan. Return the entire assembly intact to WD, if instructed to do so.

Removing the Unit Cover

Use the following steps remove the cover on the WD Sentinel DX4200 device. These steps are necessary to replace certain internal parts.

Important: To avoid electrostatic discharge (ESD) problems, ground yourself by touching metal before handling the device.

To shut down your WD Sentinel server, follow the steps outline in “Shutting Down and Rebooting the Server” on page 31.

What you’ll Need:

- Phillips screwdriver

Removing the Unit Cover

1. Before getting started, shut down the server and disconnect all external connections.
2. Place the unit on a clean and stable surface, with the back of the unit facing you.
3. Release five (5) screws on the back of the unit (Figure 6).

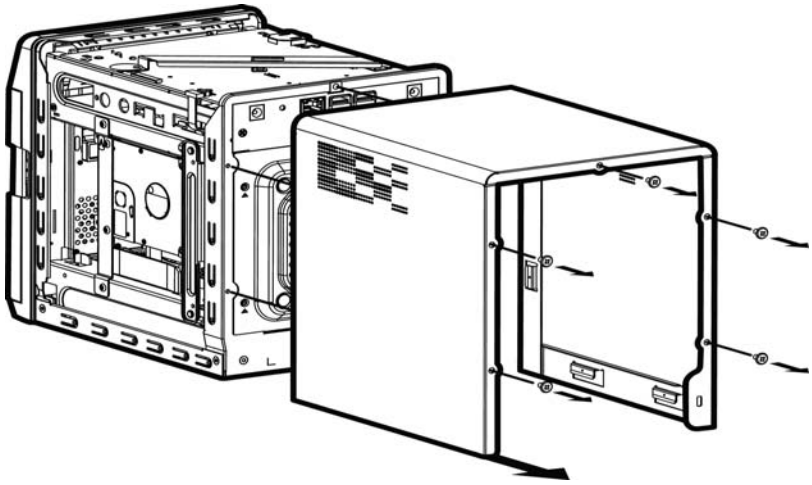


Figure 6. Unscrew and remove unit cover

4. Pull the unit cover toward you up to release the cover. (Figure 6).

Replacing the SODIMM Memory Module

The SODIMM memory module in the WD Sentinel server is “cold swappable.” This means that the WD Sentinel server must be shut down prior to your module replacement. To shut down your WD Sentinel server, follow the steps outline in “Shutting Down and Rebooting the Server” on page 31.

For details about the memory module, memory types, and drive requirements, search for Answer ID 9999 in the WD Knowledge Base at *http://support.wd.com*.

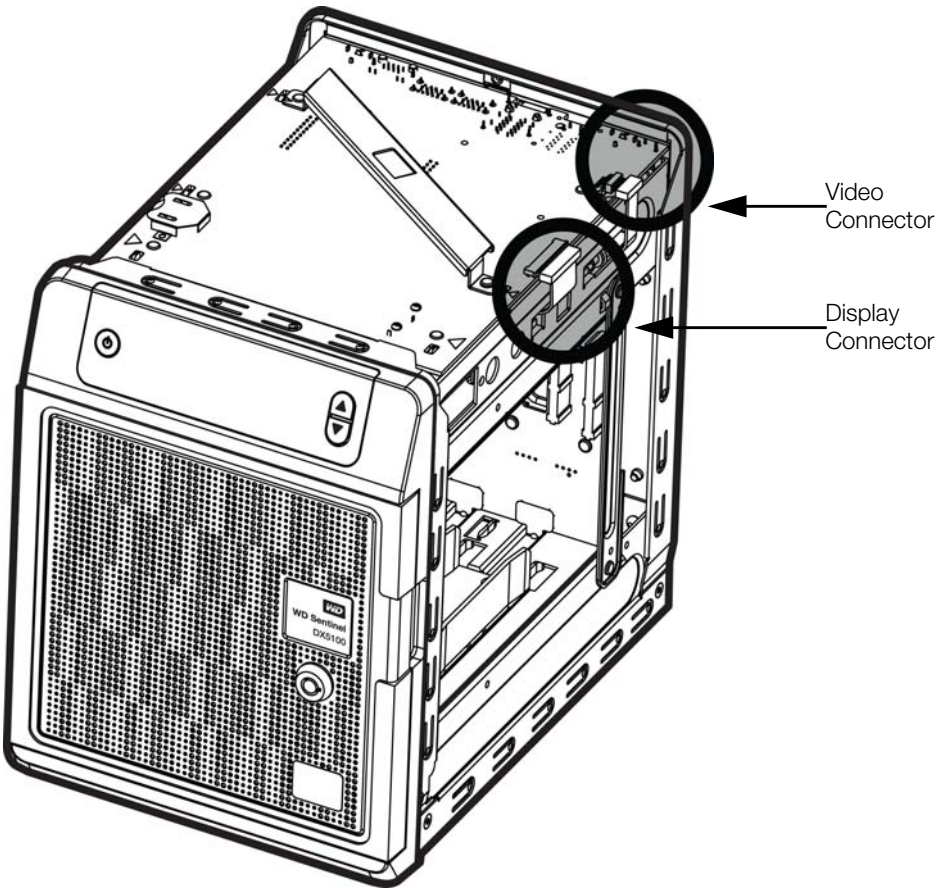
Important: To avoid electrostatic discharge (ESD) problems, ground yourself by touching metal before handling the device.

What you’ll Need:

- Phillips screwdriver
- Replacement SODIMM Memory module

Replacing a SODIMM Memory Module

1. Shut down the server.
2. Disconnect all external connections.
3. Follow the steps outlined in “Removing the Unit Cover” on page 48.
4. Disconnect all cables attached to the assembly.



Important: Ensure that you carefully lift the ZIF connector gate and remove the ZIF Display Connector.

5. On the top of the unit, loosen and remove the six (6) screws holding the PCBA unit in place.

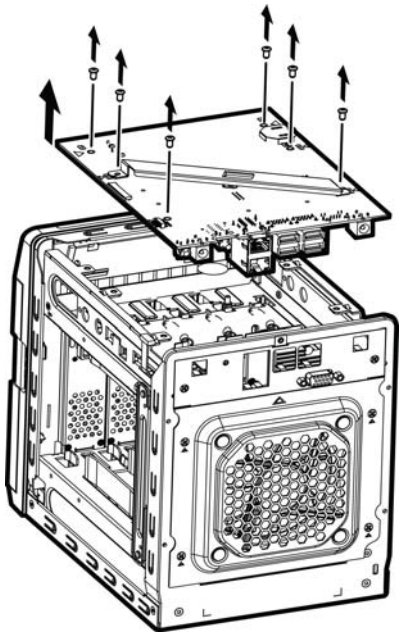


Figure 7. Remove screws from PCBA unit

6. Carefully lift the PCBA up and away from the rest of the unit, then gently place the flipped assembly on a stable flat surface.

WARNING! Ensure that the connector clears the plate when removing the assembly.

7. Remove and replace or add additional 2PL-SODIMM module(s).

Note: This unit uses memory in coordinated pairs and are color-coded. For a list of valid memory configurations, search for Answer ID 9999 in the WD Knowledge Base at *http://support.wd.com*.

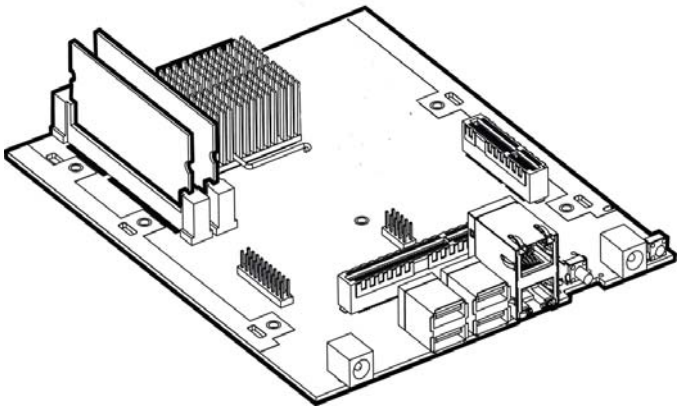


Figure 8. Replace 4PL-SODIMM module

8. Once the 2PL-SODIMM module has been added or updated, replace the PCBA back on the WD Sentinel device, ensuring that the cables are again attached to the assembly and that the PCBA is properly seated. Replace and tighten the six (6) screws holding the PCBA in place.

   Note: Do not over-tighten the PCBA screws.

9. Replace the unit cover and replace and tighten the five (5) exterior screws.

   Note: Do not over-tighten the exterior screws.

10. Connect all external connections.
11. Restart the server.

Adding a Boot Drive

The WD Sentinel server comes a 2.5-inch boot drive pre-installed with Windows Storage Server 2012 R2 Workgroup and specialized hardware services and drivers. The pre-installed boot drive(s) provides the ability to keep the OS running from the boot drive while redeploying or changing applications and folders running on the large capacity data drives.

The boot drive in the WD Sentinel DS5100 server are “cold swappable.” This means that the WD Sentinel server must be shut down prior to adding a boot drive. To shut down your WD Sentinel server, follow the steps outline in “Shutting Down and Rebooting the Server” on page 31.

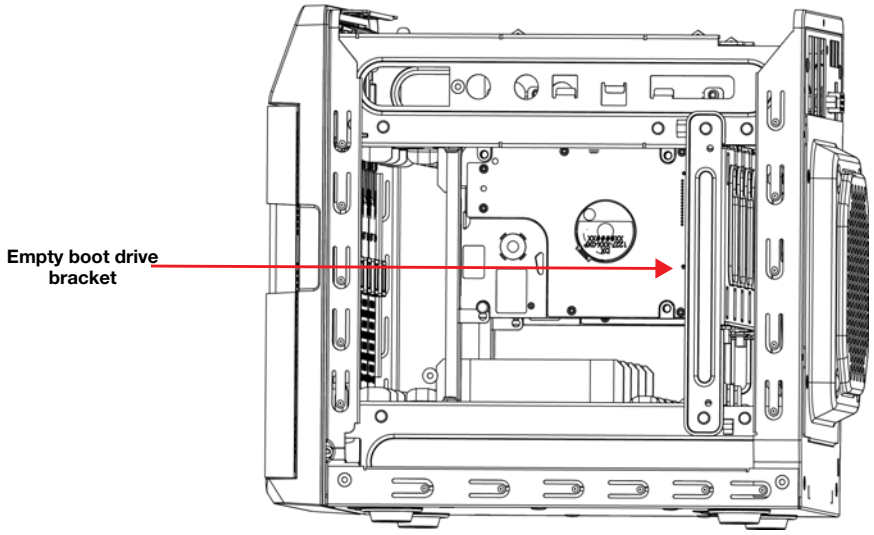
Important: To avoid electrostatic discharge (ESD) problems, ground yourself by touching metal before handling the device.

What you’ll Need:

- Phillips screwdriver
- Boot Drive kit

Adding a Boot Drive

1. Shut down the server.
2. Disconnect all external connections.
3. Follow the steps outlined in “Removing the Unit Cover” on page 48.
4. Using a Phillips screwdriver, attach the brace bar to the boot drive.
5. On the right or left side of the unit, find an empty bracket for your boot drive.



6. With the boot drive pins facing the back of the device, gently push your boot drive into the empty boot drive bracket.
7. Place and tighten two (2) screws, attaching the brace bar on the boot drive to the unit.
8. Replace the unit cover and replace and tighten the five (5) exterior screws.

   Note: Do not over-tighten the exterior screws.

9. Connect all external connections.
10. Restart the server.

WD Sentinel DX4200 Administrator Reference Sheet

Provided below is a reference sheet that allows you to keep all of the useful information associated with your WD Sentinel DX4200 server in one location. Enter the information identified below and keep this checklist in a safe location for future reference.

WD Sentinel DX4200 Server Name:_____

WD Sentinel DX4200 IP Address:

- Static IP Address: _____
- Dynamic IP Address: _____

WD Sentinel DX4200 Server Password:_____

User Name: _____

Domain Name: _____

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